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During the period June 1996 to June 1997, the questionnaire to be used in the study has been devised. A detailed pilot study has been undertaken, with resulting changes being made to the questionnaire. The questionnaire is comprehensive, with questions looking at background factors, theatres of operation, exposures, and health outcomes. In addition, an extensive database of literature has been developed, covering papers concerned with the effect of war on individuals, plus research pertaining specifically to the Persian Gulf War.
Currently, the main body of study is underway, with 12750 questionnaires having been or in the process of being dispatched to currently serving or ex military personnel. Tracing procedures have been extensively investigated and algorithms devised.
Problems have been encountered during the year, but at the level of the Ministry of Defence and the quality of adddresses being released by the armed forces. Considerable manpower has been taken up ensuring that addresses received were in a suitable format for mailing purposes. Political developments have also impinged on the project.
Her Majesty's Government announced funds for research into the "Gulf War Syndrome", which resulted in our study being held back as it was deemed desirable that all UK which resulted in our study being held back as it was deemed desirable that all UK research proceeds in an integrated fashion.

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Sep 29, 1997

Professor Simon Wessely

Date

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### **Summary**

This is the 1<sup>st</sup> annual progress report of a 3 year epidemiological study into the effects on health of service in the Persian Gulf War.

During the period June 1996 to June 1997, the questionnaire to be used in the study has been devised. A detailed pilot study was undertaken, with resulting changes being made to the questionnaire. The questionnaire is comprehensive, with questions looking at background factors, theatres of operation, exposures, and health outcomes. In addition, an extensive database of literature has been developed, covering papers concerned with the effect of war on individuals, plus research pertaining specifically to the Persian Gulf War.

Currently, the main body of the study is underway, with 12750 questionnaires having been or in the process of being dispatched to currently serving and ex military personnel. Tracing procedures have been extensively investigated and algorithms devised.

Problems have been encountered during the year, both at the level of the Ministry of Defence and quality of addresses released by the armed forces. Considerable manpower has been taken up ensuring that addresses received were in a suitable format for mailing purposes. Political developments have also impinged on the project. Her Majesty's Government announced funds for research into the "Gulf War syndrome", which resulted in our study being held back as it was deemed desirable that all UK research proceeds in an integrated fashion.

### **Study Outline**

### Background

This study was set up to address the prevalence of explained and unexplained illnesses, including chronic fatigue like symptoms, in members of the United Kingdom Armed Forces who were deployed to the Persian Gulf during the Gulf War and two comparison groups: those who had served in peace keeping forces in Bosnia, and a group who had served in neither theatre (Era controls).

### **Aims**

This epidemiological study aims to ascertain whether service in the Persian Gulf War by UK armed forces personnel was associated with an increase in physical and / or psychological morbidity compared to those who were not deployed or those deployed to Bosnia. If it is so, evidence will be sought for an increase in known disorders, new or ill-defined conditions such as chronic fatigue syndrome, or an illness peculiar to Gulf War service.

### Methodology

The epidemiological study of the prevalence of unexplained illnesses in the population at risk utilizes a two stage design. Stage 1 will be a questionnaire survey of 4250 Gulf War veterans selected at random, an equivalent sample of Bosnia Veterans and a group selected who had served in neither theatre. The second stage will involve interview, examination and testing of all those (approximately 10%) in the first stage who score above a cut off defining subjective ill health. Information gathered at the second stage will be used to estimate the prevalence of diagnosed and unexplained morbidity, including chronic fatigue, in UK personnel, and to calculate whether there is an excess associated with Gulf War and / or Bosnia service. In the event that there is, the researchers will examine the self assessed effect of deployment related exposures such as pesticides, vaccinations and psychological trauma as well as pre morbid and psychosocial factors which may be implicated in such an increase. We anticipate that this will identify avenues for further biological and psychosocial research.

### Progress to date

The work of year one has been involved entirely with the first phase of the study, primarily with

- 1. The development of the questionnaire used in the postal survey.
- 2. The setting up of administrative databases
- 3. The setting up of tracing mechanisms

### Development of the questionnaire

### Standardised instruments

A number of standardised instruments have been included in the questionnaire including: the Medical Outcomes Health Survey Short Form (SF-36), the General Health Questionnaire (GHQ-12) and the Chronic Fatigue Syndrome Questionnaire.

### Exposure / service history

The section dealing with exposures faced by personnel in theatre was devised, and revised according to advice received from a large number of military personnel (including PGW veterans). The health symptom checklist was evaluated by senior military medical personnel, who critiqued it for accuracy and appropriateness for the theatres being investigated in the study. The military advisors also contributed to the development of the section investigating service history.

### Drugs and Alcohol; Sexual behaviour

Questions asking about i) drugs and alcohol use and ii) sexual behaviour proved to be very controversial, and served to highlight the cultural differences that exist between the UK and USA. In the case of drugs, it was felt that as drug use was not a pervasive problem in the UK military that they should not be included. Alcohol use was restricted to a single question, for fear of raising concerns of confidentiality. As a result of strong advice given by both the military and lay advisors, questions asking about sexual behaviour were removed.

### Lottery

An incentive to complete the questionnaire was given in the form of an option to participate in a £1000 draw. There was considerable discussion as to whether this was an appropriate incentive, but research has shown that such methods may improve response rates.

### Era control group

The questionnaire had to be modified for the Era comparison group, as they would not have had exposure to the same type of scenarios as those personnel who had been deployed to Bosnia and / or the Gulf. This resulted in the development of two questionnaires, essentially identical apart from questions relating to exposures and health symptoms. Copies of the questionnaires are given in the appendix.

### Pilot Study

The final version of the questionnaire was piloted on 200 serving military personnel, and helped identify linguistic ambiguities. The logistics involved in conducting the mailing of questionnaires to the armed forces were identified and procedures established. Those personnel based in the UK would receive their questionnaires using the military mail service, for those based overseas we would use the British Forces Posted Overseas (BFPO) mailing services. An additional bonus of using the military mailing services has been that they have been provided at no cost to the study. Those personnel who had left the forces, but were eligible for inclusion in our study, would be sent the questionnaire via the Royal Mail.

The response rates for the pilot study were:

	Bosnia	Gulf	Era
% returned	53	47	65

The overall response rate was 55% after 2 mailings. We have good reason to believe that a substantial proportion of non-responses is due to problems of distribution and tracing.

### Development of Tracing Strategies for non respondents

Tracing those who are still in active service will be straight forward, as we have the co-operation of the Army Staff Duties Section. However, since 1990 it can be expected that over 50% of those deployed will have left the services.

Over the year, a great deal of time has been spent discussing strategies for the tracing of this group of non responders.

Three main tracing routes were identified: i) Health Authorities ii) Royal British Legion (RBL) data bases and iii) National Health Service Central Register (NHS-CR),

### **Health Authorities**

There exists a system whereby it is possible to identify which of the approximately 40 regional administrative health authorities in the country an individual belong to. These can then be approached and asked to supply addresses for named individuals. Permission has to be sought from the regional Chief Executives for their co-operation in releasing these details to use. So far, the response has been varied, with most but not all willing to collaborate. This is the easiest route for our study to pursue, and we are working closely with the other study teams to facilitate this tracing procedure.

### Royal British Legion (RBL) data base

The RBL has compiled a database of addresses of non serving military personnel. They have expressed a willingness to allow us access to this database in order to trace non responders.

### NHS-CR

Everybody in the United Kingdom is supplied with a National Health number, which is registered centrally at the NHS-CR. It is possible to "flag" individuals which can in turn be used for the purposes of tracing them. This is a time consuming process, as the procedure is not yet fully computerised which means that a lot of the matching is completed manually. This will be the system used if individuals can not be traced using the mechanisms described above.

### Steering group Committee

A Steering Group Committee was created to regularly review Progress of the study, and also to advise how best to obtain co-operation from the military personnel to participate in the study. The committee consists of Gulf War veterans, the study team

members and other researchers. Their views were elicited regarding, amongst other things, the content of the questionnaire and how best to publicise the study. Each revision of the questionnaire was passed to the committee to ensure that any alterations made were appropriate ones.

### **Publicity**

Extensive publicity was undertaken to maximise the number of questionnaires returned. This included placing articles in military magazines such as Soldier . The Royal British Legion , a welfare organisation for ex service men and women, has given invaluable support to the study. They have published articles in their circular magazine, as well as placing posters explaining the importance of the study in each of their 4500 clubs around the country.

### Problems encountered.

There have been considerable problems encountered in during the last year, in the implementation of this study. They fall into three main categories:

- 1) The release of research funds by the United Kingdom Government to investigate the effect of serving in the Gulf on the health of military personnel
- 2) Co-operation of the Ministery of Defence in releasing address information required for posting the questionnaires in the first phase
- 3) The quality of addresses given by the forces to the study.

### United Kingdom Gulf War Health Study research program

Late in 1996 the UK government called for proposals for research into the health of military personnel who had served in the Gulf War. The program of research is administered by the Medical Research Council (MRC). A decision was imposed upon us that all research carried out in this field would best be served if it was seen to occur in an integrated fashion, resulting in a "2 phase delay" for our study. The first delay occurred whilst studies were peer reviewed and decisions made re: their funding. Subsequently, a common timetable was imposed for eg., tracing of non responders, despite the current project being further along the research path than our colleagues. However, the "umbrella" provided by the MRC has been valuable with regards to publicity for our project.

### Release of administrative details by the Ministery of Defence

By far the greatest problem faced by the study team in the last year has been the release of military personnel address details by the Ministery of Defence (MOD). The MOD, as a governmental organisation, has little experience of conducting large-scale medical research or dealing with confidential material with non military and non governmental organisations, unlike the US Veterans Administration. The result of this was that they were very hesitant about releasing their confidential details to non military organisations. It took a long time to eventually obtain permission to have the address details, after agreeing to comply with numerous security issues. Having obtained permission from the Minister of the Armed Forces, there was a considerable delay in the permission filtering down through the hierarchy of the MOD. There was also delay whilst the MOD removed the names of members of the Special Forces, who, for policy and security reasons were excluded from these studies. Other

problems were encountered with those personnel whose addresses were listed in Northern Ireland (again for security reasons).

### Quality of addresses obtained

The MOD has a key role to play in the collection and dissemination of the military personnel address details. When address information was received from the Data Analysis and Statistical Agency, the MOD had to ensure that certain individuals names were removed from the listing before they were provided to the study teams. In addition, the MOD had sole responsibility for removing from the list those individuals who were deceased. The latter involved liasing with the NHS-CR, again in collaboration with the other two study teams. This necessary screening procedure introduced delays into our research program, as the questionnaires could not be despatched before the addresses were received.

The study sample included military personnel from the three services, army, navy and air force. There was a marked lack of consistency across the forces in not only the quality of addresses that they supplied to the MOD, but also in the content of the addresses. For example inconsistent unit and administrative addresses were sometimes supplied, with no explanation. This lack of consistency introduced a level of uncertainty into the study, which had to be resolved before the mailing could take place.

The addresses were supplied in the form of a database: ACCESS for Windows 95, version 7. This program was also used to produce necessary labels for mailing. Addresses have been supplied with a mixture of separated address fields, and long string variables which have to be manually converted into appropriate address fields. This process was not only time consuming, but served to highlight the incompleteness of the address fields. These issues had to be resolved such that the individuals identified by the random sampling for inclusion into the study in fact had a secure and reliable mailing addresses, and so received a questionnaire.

### Office Space

It has been necessary to renovate offices to suite the security requirements specified by the MOD. This has been a lengthy procedure, necessitating negotiations with the King's College School of Medicine and Dentistry, in whose grounds we are located. However, the renovation work is nearing completion, and our Gulf War Illnesses Research Unit was relocated in September 1997.

An archive of published research is being compiled for reference and stored on site along with an electronic reference database.

### **Future planning**

Once the first phase of the project is completed, individuals identified as "cases", along with appropriate comparison group, will be invited to attend for the second phase of the study. An application has been made to the Department of Defence for additional funding for this phase, which will include detailed invasive and non-invasive neurophysiological and neuropsychological tests.

### **Study Personnel**

Study Co directors Professor Simon Wessely MD., Professor Anthony David MD.

Military Advisor Lieutenant Colonel John Graham

Statistician Mr. Nick Blatchley

Study Co-ordinator Ms Susan Ferry, BSc, MSc Epidemiology

Research Assistant Ms Lisa Hull BSc Applied Psychology and Sociology

At the end of June 1997, Susan Ferry resigned as study Co-ordinator, and was replaced by Ms. Catherine Unwin (BSc Psychology, MSc Epidemiology).

### **Appendix**

Questionnaires used in phase one of investigation.

Study Group	Questionnaire Colour
-------------	----------------------

1. Gulf Sandy

2. Bosnia Blue

3. Era Controls Green



### King's College School of Medicine and Dentistry Bessemer Road, London SE5 9PJ Telephone/Facsimile - 0171 737 5267



### HEALTH SURVEY OF MILITARY PERSONNEL

We are seeking your help to provide information for one of the largest studies of military health ever to be undertaken in the United Kingdom. We are carrying out research into the effects of serving in the Gulf War, Bosnia, and the Armed Forces as a whole, on United Kingdom military personnel. To do this we are sending a questionnaire to 13,000 current and former military personnel chosen at random. We will be asking about their health and military experiences. This study is not funded by the MoD, and is independent of the MoD. The MoD has given its cooperation to carry out the study, otherwise we would not be able to know who you are.

We would be most grateful if you could find 20 minutes to complete this questionnaire. IT IS IMPORTANT FOR US TO RECEIVE YOUR REPLY EVEN IF YOU DO NOT HAVE ANY HEALTH PROBLEMS OR IF YOU NO LONGER SERVE IN THE ARMED FORCES. A pen and envelope are provided for the easy completion and return of the questionnaire. The postage is already paid. As a token of our appreciation, when we have received your completed questionnaire, you will have the opportunity to have your name entered in a £1,000 prize draw if you so wish.

All the information collected will be treated in such a way that you will not, and never can be, identified by anyone other than the research team. It will be secured against all unauthorised access. Your responses are totally confidential and no third party will ever be allowed access to the data. We guarantee that the results of the study will be published when ready.

You are under no obligation whatsoever to take part in the study. Nevertheless, we must emphasise how vital your participation is to the understanding of the effects of military service on health. This will be of importance not just to you as an individual, but to military and former military personnel as a group and to others in the future.

If you have any concerns or questions, please write or telephone the Study Co-ordinator Catherine Unwin at the Gulf War Illnesses Research Unit, the phone number and address are at the top of this page. We will be pleased to try and answer any questions you have.

Thanking you in anticipation of your help.

Yours sincerely,

Professor Simon Wessely

Co-director

Professor Anthony David

Co-director

### We would like a few background details first.

1.	What is your date of birth?		1 1	
, .			Date Month	/ear
2.	Are you:			
	Male	<b>□</b> ¹	Female	$\square^2$
3.	Do you consider yourself to be:			
	White Black Caribbean Black/African Black/other Indian	$ \Box^{1} $ $ \Box^{2} $ $ \Box^{3} $ $ \Box^{4} $ $ \Box^{5} $	Pakistani Bangladeshi Chinese Asian/other Other	□ <sup>6</sup> □ <sup>7</sup> □ <sup>8</sup> □ <sup>9</sup>
4.	What is your current marital statu	s?		
	Married Living with partner Never married	□¹ □² □³	Separated Divorced Widowed	□ <sup>4</sup> □ <sup>5</sup> □ <sup>6</sup>
5.	For females;			
	a) Have you ever been pregnant	or ever tried to	o become pregnant?	
	Yes	$\square^1$	No	$\Box^2$
	For males;			
	b) Have you ever fathered a preg	gnancy or ever	tried to father a child?	
	Yes	<b>□</b> ¹	No	$\square^2$
6. a	a) What is the highest level of ed	ucation that yo	ou completed?	
	Left school before taking 'C 'O' levels/ GCSE's 'A' levels/Highers Degree	)' Levels/GCS	E's	□¹ □² □³ □⁴
ł	b) What qualifications have you o	gained since jo	oining the military?	
7. :	a) Are you currently working:			
	Full-time Part-time Unemployed but seeking w Not working because of ill l Retired from the military Retired from all work		ty	□1 □ <sup>2</sup> □ <sup>3</sup> □ <sup>4</sup> □ <sup>5</sup>

b)	What is your curr	ent/most recent occupat	tion?	
8. Di	d a change in your	health cause you to cha	ange your employr	ment?
	Yes	□1	No	□²
We v	would now like	e to know some inf	formation abou	ıt your lifestyle.
	our study a regula t least one year.	r smoker is someone	who has smoked	at least one cigarette a day
9.a)	Have you smoke	d more than 5 packets o	of cigarettes (5 x 20	)) in your lifetime?
	Yes	<b>□</b> ¹	No	<b>□</b> <sup>2</sup>
	If YES,	go to question 9b	If NO, g	o to question10a
b)	If <b>YES</b> , are you <b>c</b>	urrently a regular smok	er?	
	Yes	<b>□</b> ¹	No	<b>□</b> <sup>2</sup>
	If YES,	go to question 9c	If NO, g	o to question 10a
c)	If YES, how man	y cigarettes do you smo	oke?	
		cigarettes per d	lay .	
Here	are some question	ons about how much y	ou drink.	
10.a)	On average, how week do you hav		alf pint of beer or a	glass of wine) of alcohol per
	None 1-3 unit 4-10 un 11-20 u 21-30 u More th	its nits		□¹ □² □³ □⁴ □⁵
b)	Have you change	ed your alcohol intake in	the last five years	?
	No Yes, ind Yes, re			□¹ □² □³

11. The following questions are about activities you might do during a typical day, and whether your health limits you in these activities.

	Has your health limited you in:	No, not limited at all	Yes, limited a little	Yes, limited a lot	
a)	Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports (e.g. Football)?	□¹ (Please go to 11c)	□² (Please go to 11b)	□³ (Please go to 11b)	
b)	Moderate activities, such as moving a table, pushing a vacuum cleaner, ten-pin bowling, or swimming?	<b>□</b> ¹	<b>□</b> <sup>2</sup>	□3	
	Lifting or carrying groceries?	□1	$\square^2$	$\square^3$	
	Climbing several flights of stairs?	$\Box^1$	$\square^2$	$\square^3$	
	Climbing one flight of stairs?	$\square^1$	$\Box^2$	$\square_3$	
	Bending, kneeling, or stooping?	□1	$\square^2$	$\square^3$	
	Walking more than one mile?		$\square^2$	$\square^3$	
	Walking 100 yards?		$\square^2$	$\square_3$	
	Bathing and dressing yourself?	□ <sup>1</sup>	□ <sup>2</sup>	□3	
c)	In the <u>past month</u> , to what extent has your physican normal social activities with family, friends, neighbore.	al health or emotion ours, or groups?	nal problems interfe	red with your	•
	Not at all Slightly Moderately Quite a bit Extremely	□¹ □² □³ ·			

d) During the past 4 weeks, ha activities as a result of your r		the following problems	with your work	tor other regular daily
			YES	NO
Cut down on the amount of time activities	e you spent on wo	ork or other	<b>□</b> ¹	$\Box^2$
Accomplished less than you w	ould like			$\square^2$
Were limited in the <b>kind</b> of work or other activities			$\square^1$	$\square^2$
Had <b>difficulty</b> performing the work or other activities (eg. it took extra effort)				$\Box^2$
e) Please choose the answer the	nat best describes	how <u>true</u> or <u>false</u> each o	of the following	g statements are for you.
		(Please tick one box	on each line	)
	Definitely true	Mostly true	Mostly false	Definitely false
I seem to get ill more easily than other people		$\Box^2$	$\square_3$	□4
I am as healthy as anybody I know	□1	$\Box^2$	$\square^3$	□4
I expect my health to get worse	<b>□</b> ¹	$\square^2$	$\square^3$	□4
My health is excellent	□1	$\Box^2$	□3	□⁴
f) Have you experienced a cha	ange in your function	oning since the <b>GULF V</b>	VAR?	
Yes □¹	No □²	Not applicable	$\square^3$	
If YES, do you attribute this	change to your se	rvice in the GULF?		
Yes □¹	No □²			
g) Have you experienced a ch	ange in your functi	oning since BOSNIA?		
Yes □¹	No □²	Not applicable	$\square_3$	
If YES, do you attribute this	change to your se	ervice in BOSNIA?		
Yes □¹	No □²			

### 12. This section asks you about your military background.

a) When you joined the	e military-			
i) were you in:	Army	Royal Marines	Royal Navy	Royal Air Force
	$\Box^1$	$\Box^2$	$\square^3$	□4
ii) were you a:	Regular	Regular Reservist	Volunteer Reservist	Other <sup>4</sup> (Please specify
	□1	$\Box^2$	(TA/RNR/ RRAF) □³	
iii) What was your sub	ostantive rank?			
iv) Which Unit did you	join?			
v) Which Corps did yo	ou join?			
b) If you were deployed	to the GULF-			
i) when you	Army	Royal Marines	Royal Navy	Royal Air Force
were deployed were you in:	□1	$\Box^2$	$\square^3$	□4
ii) when you were deployed	Regular □¹	Regular Reservist  □²	Volunteer Reservist (TA/RNR/ RRAF) □³	Other <sup>4</sup> (Please specify
were you a:	L		L	
iii) What was your sub	stantive rank on be	ing deployed?		
iv) Which Unit were yo	ou in on deploymen	t?		
v) Which Corps were	you in on deployme	nt?		
c) If you were deployed	to BOSNIA-			
i) when you were deployed	Army	Royal Marines	Royal Navy	Royal Air Force
were you in:	<b>□</b> ¹	<b>□</b> <sup>2</sup>	$\square^3$	<b>□</b> <sup>4</sup>
ii) when you were deployed	Regular	Regular Reservist	Volunteer Reservist (TA/RNR/ RRAF)	Other 4 (Please specify
were you a:	□ <sup>1</sup>	$\Box^2$	$\square^3$	
iii) What was your sub	stantive rank on be	ing deployed?		
iv) Which Unit were yo	ou in on deploymen	t?		
v) Which Corps were	you in on deployme	ent?		

d) Are you still in the	military?	Yes		No	$\square^2$	
IF YES:						
i) Are you in:	Army	R	oyal Marines	Royal N	avy	Royal Air Force
			<b>□</b> <sup>2</sup>	$\square^3$		□4
ii) Are you a:	Regular □¹	Reg	gular Reservist □²	Volunteer Ro (TA/RNR/ I □³		Other <sup>4</sup> (Please speci
iii) What is your sub	stantive rank? _					
iv) Which Unit are y	ou in?					
v) Which Corps are	you in?					
If NO:						
vi) Were you medic	ally discharged?	Yes		No	$\square^2$	
vii) What was your s  e) FOR EVERYONE T  i) Please state the	O ANSWER PLE	ASE. you have beer	n or were in <b>e</b> ach	of the following:		
eg. Regular	3	Regular Res	servist 0	Vo	lunteer Re	servist 0
Regular		Regular Res	servist	Vo	lunteer Re	servist
ii) Did you deploy o	n; (Please tick all	that apply)				
OP Granby	□°					
OP Corporate						
OP Hanwood	d o					
OP Grapple	□d	Which	h OP Grapple? _			d1
Others	□e	Pleas	se specify			
				****		e1
			0			
iii) How many tours		nd have you b	een on?			
None						
Number of to	urs					

# 13. This section asks about your deployment to the GULF AND/ OR BOSNIA.

If you have been to one theatre, please fill out the appropriate column. If you have been to both the GULF and BOSNIA please complete BOTH columns.

	Please complete th	e complete this column if you were deployed to the GULF.		Please complete this column if you were deployed to BOSNIA.	poloyed
Were you:	Ordered to serve   □¹	√olunteered to serve □	Ordered to serve	□¹ Volunteered to serve	rve $\Box^2$
Did you undertake pre-deployment training?	Yes 🗀	1 No   2	<sup>2</sup> Yes	No '□	
Did you deploy;	With your complete unit As part of your unit As an individual	nit	With your complete unit As part of your unit As an individual reinforcement	e unit it sinforcement	ם ב
During your tour did you leave theatre?	Yes $\square^1$	l¹ No □²	<sup>2</sup> Yes	D¹ No	
Before your deployment where were you based? (Please state nearest town)					
During your deployment where were you based? (Please tick all that apply)	Iraq □² Saudi Arabia □▷ Kuwait □°	e q	Split Kisseljac Omis Sarajevo	☐ Tomislavgrad ☐ Gorazde ☐ Gornji Vakuf ☐ Tuzla	ە ئەڭ ھ
If in the Nawy which ship were you on?	Other $\square^d$ (Please specify)		Ploce (Please specify)		7
Where did you return after deployment? (Please state nearest town)					
How long did you spend in camp on your return before demobilising?	эр 	days weeks	<u>ν</u>	days	_weeks
Did you take time off before returning to work? If YES, how long?	Yes	1 No □2	Yes	No No	$\Box$
				Continued	

	Please comple deple	Please complete this column if you were deployed to the GULF	were	Please com	mplete this column if deployed to BOSNIA.	Please complete this column if you were deployed to BOSNIA.	
What was your primary duty?	Engaged in combat			Engaged in combat			
	Combat support Signals Medical Logistics	2 E 0 D		Combat support Signals Medical Logistics	ةً مَّ مَ		
	Staff duties	2	Service	Staff duties	S		
	Other (Please specify)	°		Other (Please specify	<u> </u>		
What were your specific duties?							
Where you involved in an "incident" at any time?	Yes	No D		Yes	_	No D <sub>2</sub>	
If <b>YES</b> : What was it?							
What was your involvement in it?							
When was it? (Please specify an approximate date) For how long did the "incident" last? (Please specify an approximate length of time)							
Did any of the military actions you took, or didn't take, directly cause the death of another person?	ake, directly cause the	death of another persor	ı? Yes	, D	0		
If you were deployed to the Gulf, were you stationed within 30 miles of Khamisiyah at any time?	ned within 30 miles of K	hamisiyah at any time?	Yes	, N	0	Don't Know	<u>"</u>
			Not ap	Not applicable			

# 14. We would like to know about your experiences whilst in theatre.

Please tick whether you have EVER had any direct contact with, or were exposed to, any of the items listed below.

Indicate whether this was when you were in the GULF and/ or BOSMA. If so, please estimate how often you were exposed and whether you had an adverse reaction to it.

	EVERYONE please complete this column	E please iis column	69.0	deb deb	Please complete this column if you were deployed to the GULF	In If you w	0)	Plea	dmoo es	Please complete this column if you were deployed to BOSNIA	nn if you NIA	were	
	Have you EVER been in confact with? (a)	(토롱 been ith? (a)	Were you in contact with	ou in with	If YES, how many times	Did you have an adverse	lave se	Were you in contact with	£ £	If YES, how many times	Did you have	have	1
	in the second se		this when you were in the	the	were you exposed to	reaction or fee unwell as a	199	this when you were in	ne o	were you exposed to	reaction or feel unwell as a	or feel	
			301E2(6)	9)	this item? <sup>(c)</sup>	result of this experience? <sup>(d)</sup>	this	Bosnia? (b)	(b)	this item? <sup>(c)</sup>	result of this experience? (d)	િthis ૧૯૯૨ <sup>(d)</sup>	
Example;	Ves1	NO2	Ves1	No2	No. of times	Ves1	No2	Yes1	No <sub>2</sub>	No. of times	Ves	No <sup>2</sup>	T
Smoke from oil well fires	亙		D		IJ	D			D				
Burning rubbish or faeces	D		D		2		D	D		_		D	
Now please complete the table below.	elow.												
Smoke from oil well fires													<u></u>
Exhaust from heaters or							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					***************************************	. ~
generators (eg. Kerosene heaters)													
Diesel and/or other petrochemical													<u>ر</u>
fumes										-	i 	i	
Diesel or other petrochemical fuel					Waster of the control	П					П	0	4
on your skin			[	ı						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Burning rubbish or raeces				_									. 21
CARC (Chemical Agent Resistant Compound) paint										_			ဖ
Other paints, solvents, or													
	C	Г	С	Ε					[		ı	-	
Microwaves		] [							]		ם כ	ם	0 0
Personal pesticides (e.g. creams,													9
sprays, or flea collars)													
Pesticides on your clothing or		П			-					7			£
pedding										_			
Chemical / Nerve gas attack										-			12
Mustard gas or other blistering agents													5
Food contaminated with smoke, oil, or other chemicals													4
Local food other than food					## A P P P P P P P P P P P P P P P P P P								15
provided by the Armed Forces													

ŧ			9 !	-	2	9	70	21	22	23	24	72	56	27	78 78	ç	)	
/ere	have se or feel s a this	No <sup>2</sup>																
ın if you w NIA	Did you have an adverse reaction or feel unwell as a result of this	Yes																
Please complete this column if you were deployed to BOSNIA	if YES, how many times were you exposed to this item? (c)	No. of times																
ap dwoo as	ou in with en you \(\alpha^b)	No <sup>2</sup>																
Plea	Were you in contact with this when you were in BOSNIA <sup>b)</sup>	Yes1																
ere	have rse or feel is a f this	No <sup>2</sup>				П								П				
n if you JLF	Did you have an adverse reaction or feel unwell as a result of this	Yes																
Please complete this column if you deployed to the GULF	if YES, how many times were you exposed to this item? (c)	No. of times																
dep dwoo es	u in with en you the	No <sup>2</sup>																
Plea	Were you in contact with this when you were in the GULF?	Yes																
E please is column	Ith? (a)	No <sup>2</sup>															rience	
EVERYONE please complete this column	Have you EVER been in contact with? (a)	Yes															osure or expe mely stressfu	
			Dead animals	Bathe in or drink water contaminated with smoke, oil, or other chemicals	Bathe or swim in the local pond, or river	Suffer from heat cramps, heat exhaustion, heat stroke, or other heat illnesses	Suffer a combat related injury that required medical attention during your deployment	See any dismembered, burnt or otherwise disfigured bodies	See any maimed or seriously injured soldiers	Witness anyone dying	Wear NBC suits at times other than training	Have a SCUD missile explode in the air or on the ground within one mile of you	Have artillery, rockets, mortars, or anything else, other than SCUD missiles, explode in the air or on the ground close to you	Come under small arms fire	Hear chemical alarms sounding	POWs/displaced refugees	Please give details of any other exposure or experience which you consider harmful or extremely stressful	

# 15. In this section we would like some information about your medical treatment whilst in 'the GULF AND/ OR BOSNIA.

			ete this col oyed to the		Plea		ete this col leyed to BC	
Do you have a record of vaccinations you have been given?	Yes	□¹	No	<b>□</b> ²	Yes	□¹	No	□ <sup>2</sup>
If YES, can you please refer t If NO, please do your best to Please indicate if you have n	rememi	ber what y	ou have be	en given and		e the sect	ion below.	
How many vaccinations did you receive during the 2 months before deployment?	by inje	ection	by moi	uth	by inje	ction	by mo	uth
Please list what each vaccination was for. eg. Tetanus, anthrax, etc.								
During deployment how many vaccinations did you receive in theatre?	by inje	ction	by mou	uth	by inje	ction	by mor	uth
Please list what each vaccination was for.								
·								
Did you experience any side effects from the vaccinations?	Yes	□¹	No	$\Box^2$	Yes	□¹	No	□ <sup>2</sup>
While in the military have you used NAPS (little white pills in foil packs), which are used to protect against nerve agents?	Yes		No	□ <sup>2</sup>	Yes		No	□ <sup>2</sup>
If YES;		•••••••			<u> </u>		an er en samme alle sallen er eller seller i selle salle samme se en en e	
how many days did you take NAPS?			days					
In an average day, how many NAPS did you take?			pills					
Whilst in the Gulf, did you suffer from "Saudi Flu"?	Yes	$\Box^1$	No	□ <sup>2</sup>				

### 16. The section asks about health.

During the PAST MONTH have you suffered from any of the following symptoms. If so, please tick how bad it is and whether you FIRST had this symptom BEFORE or AFTER you served in the GULF AND/ OR BOSNIA.

	In the MONTI have y had? <sup>(c</sup>	H, ou	If <u>YES,</u> h	oow bad is	s it? <sup>(b)</sup>	Did you <u>I</u> have this symptom BEFORE AFTER y went to t GULF? <sup>(c</sup>	or ou he	Did you I have this sympton BEFORE AFTER y went to BOSNIA	or ou	
SYMPTOMS	Yes <sup>1</sup>	No²	Mild <sup>1</sup>	Mod <sup>2</sup>	Severe <sup>3</sup>	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Chest pain										1
Headaches										2
Rapid heartbeat										3
Irritability/ outbursts of anger										4
Unable to breathe deeply										5
enough										
Faster breathing than normal										6
Feeling short of breath at rest										7
Wheezing										8
Sleeping difficulties										9
Feeling jumpy/easily startled										10
Feeling unrefreshed after						; 🗆				11
sleep				•						
Fatigue										12
Double vision										13
Intolerance to alcohol										14
Itchy or painful eyes										15
Shaking										16
Tingling in fingers and arms										17
Tingling in legs and arms										18
Numbness or tingling in										19
fingers or toes							···			
Feeling distant or cut off from										20
others										
Constipation										21
Flatulence or burping										22
Stomach cramp										23
Diarrhoea				· 🗆						24
Dry mouth										25

Continued.....

	In the I MONTI have y had? <sup>(a</sup>	H, ou )	If <u>YES,</u> F	now bad is	s it? <sup>(b)</sup>	Did you I have this symptom BEFORE AFTER y went to t	or ou he	Did you have this sympton BEFORE AFTER y went to BOSNIA	or or	
SYMPTOMS	Yes <sup>1</sup>	No <sup>2</sup>	Mild <sup>1</sup>	Mod <sup>2</sup>	Severe <sup>3</sup>	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Persistent cough										26
Lump in throat										27
Sore throat										28
Forgetfulness										29
Dizziness										30
Feeling disorientated										31
Loss of concentration										
Pain on passing urine										33
Passing urine more often										34
Burning sensation in the sex										35
organs										
Loss of interest in sex										36
Increased sensitivity to noise										37
Increased sensitivity to light										38
Ringing in the ears										39
Avoiding doing things/										40
situations										
Pain, without swelling or										41
redness, in several joints										
Joint stiffness										42
Night sweats which soak the										43
bedsheets										
Feeling feverish										44
Loss or decrease in appetite										45
Nausea										46
Vomiting				Q						47
Distressing dreams										48
Unintended weight gain greater than 10lbs										49
Unintended weight loss greater than 10lbs										50

a) what do you think is wrong with you?	
a) what do you think is wrong with you?	
)	
(Please complete this column if you were deployed	(Please complete this column if you were deploye
to the GULF)	to BOSNIA)
Do you think any of these symptoms have been caused	Do you think any of these symptoms have been caus
Do you think any of these symptoms have been caused by serving in the Gulf?	Do you think any of these symptoms have been caus by serving in Bosnia?
by serving in the Gulf?	by serving in Bosnia?
Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²	
by serving in the Gulf?  Yes □¹ No □²	by serving in Bosnia?
oy serving in the Gulf?  Yes □¹ No □²	by serving in Bosnia?  Yes □¹ No □²
oy serving in the Gulf?  Yes □¹ No □²	by serving in Bosnia?  Yes □¹ No □²
by serving in the Gulf?  Yes □¹ No □²	by serving in Bosnia?  Yes □¹ No □²
Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²  If YES, which ones?	by serving in Bosnia?  Yes □¹ No □²
by serving in the Gulf?  Yes □¹ No □²	Yes □¹ No □²
by serving in the Gulf?  Yes □¹ No □²	by serving in Bosnia?  Yes □¹ No □²

17. During the PAST YEAR did you have any of the following medical problems/ conditions? Please tick the appropriate box below. If YES, could you please tick whether you FIRST had this problem BEFORE or AFTER you went to the GULF AND/ OR BOSNIA.

	Have you h the followi PAST YEA	ng in the	If <u>YES</u> , did have this p BEFORE of you went to GULF? (b)	roblem r AFTER	If YES, did have this p BEFORE o you went to BOSNIA? <sup>(c</sup>	roblem r AFTER	
CONDITION	Yes <sup>1</sup>	No²	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	
High blood pressure							1
Heart disease							2
Stroke							3
Epilepsy							4
Migraines							5
Asthma							6
Loss of hearing							7
Bronchitis							8
Pneumonia							9
Tuberculosis (TB)							1
Malaria							1
Sinus problems							1
Ear infection							1
Stomach or duodenal ulcers							1
Colitis/ Crohn's disease							1
Yellow jaundice or Hepatitis							1
Cirrhosis of the liver							1
A thyroid problem							1
Diabetes							7
Kidney (renal) disease							2
Frequent bladder infections							··· 2
Arthritis or rheumatism							2
Fibrositis or fibromyalgia							2
Back problems							2
Skin cancer							2
Any other kind of cancer							2

15

	Have you I the followi PAST YEA	ng in the	If <u>YES</u> , did FIRST have problem B AFTER you the GULF?	e this EFORE or u went to	If <u>YES</u> , did <u>FIRST</u> have problem B AFTER you BOSNIA?	e this EFORE or u went to	
CONDITION	Yes <sup>1</sup>	No <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	1
Chronic Fatigue Syndrome/ ME							27
Multiple chemical sensitivity or environmental illness							28
Yeast disease or candidiasis							29
Hayfever							30
Eczema or psoriasis							31
Dermatitis or any other skin problem							32
Any disease of the hair or scalp, including hair loss							33
Any disease of the genital organs							34
Subfertility							35
Sexual problems							36
FOR WOMEN ONLY;				•			1
Premenstrual tension							37
Period problems							38
Miscarriages							39
Any other symptoms/ health condition mentioned? (Please specify)  1)	ons we have n	ot					40
2)							41
3)							42
4)							43

# 18. We would now like to know whether any of the following smells or substances affect you, that is, bring about symptoms\*.

<sup>\*</sup>A symptom means your awareness of some discomfort or bothersome change, eg. sneezing, runny eyes, pain, swelling, nausea, or trouble concentrating. Please tick the appropriate box. If you have a symptom, please indicate if you had it BEFORE or AFTER you went to the GULF AND/ OR BOSNIA.

		the following sympton		If <u>YES</u> , did <u>FIRST</u> hav symptoms or AFTER to the GUL	e BEFORE you went	If <u>YES</u> , did <u>FIRST</u> hav symptoms or AFTER to BOSNIA	e BEFORE you went	
	Yes <sup>1</sup>	No <sup>2</sup>	Don't know³	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Smog or air pollution							П	1
Cigarette smoke								2
Vehicle exhaust or fumes								3
Copiers or laser printers								4
Newspapers, magazines, or other newsprint								5
Pesticides, herbicides, insecticides, or fertilizers								6
New office buildings or homes (eg. sealed windows)								7
Carpeting or curtains								8
Organic chemicals, solvents, glues, paints, or fuel								9
Cosmetics, perfumes, hair spray, deodorants, nail polish, or soaps								10
Anything else? (Please specify)								11

# 19. We would like to know whether or not you have been having any problems with feeling tired, weak or lacking in energy in the last few weeks.

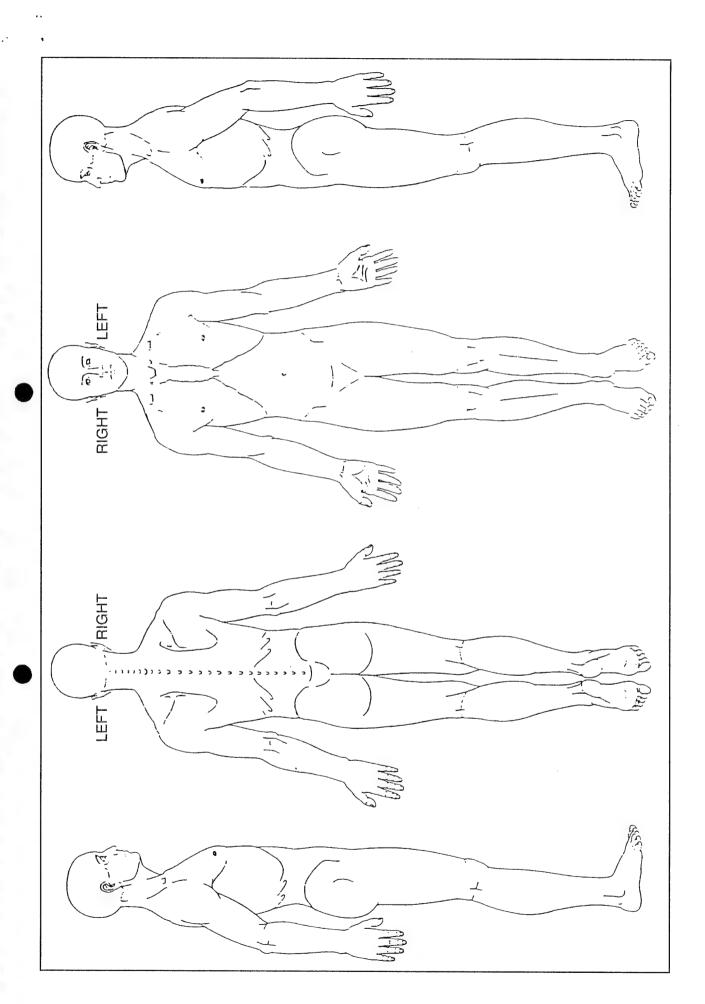
Please answer ALL the questions simply by underlining or circling the answer which you think most nearly applies to you.

	1	2	3	4
Do you have problems with tiredness?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you need to rest more?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you feel sleepy or drowsy?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you have problems starting things?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you lack energy?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you have less strength in your muscles?	Less than	Same as	More than	Much more
	usual	usual	usual	than usual
Do you feel weak?	Less than	Same as	More than	Much more
	usual	usual	usual	than usual
Do you have difficulty concentrating?	Less than	Same as	Worse than	Much worse
	usual	usual	usual	than usual
Do you make slips of the tongue when speaking?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual
Do you find it more difficult to find the correct word?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual
How is your memory?	Better than	No worse	Worse than	Much worse
	usual	than usual	usual	than usual
Do your muscles hurt at rest?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual
Do your muscles hurt after exercise?	Less than usual	No more than usual	Worse than usual	Much worse than usual

20.	. Here are some	e question	s about aches a	nd pains.		
We	e would like you to thin	nk back over	the PAST MONTH, t	hen <b>PLEASE TI</b>	ICK ONE BOX FOR EACH QUESTION.	
a)	During the PAST MO	NTH have yo	ou had any ache or p	ain which has la	asted for one day or longer?	
		Yes		No	$\square^2$	
		If YES, pleathe question	ase answer all ons below.	If NO, ple question 21	ease turn to	
b)	Do you have any pair	n NOW?				
		Yes	□¹	No	$\Box^2$	
c)	When did the pain sta	art?				
			months ago 3 months ago		□¹ □²	
d)	What do you think ha	s been the ca	ause of your pain?			

OVER THE PAGE YOU WILL FIND FOUR DIAGRAMS OF THE BODY.

PLEASE SHADE IN THE DIAGRAMS WHERE YOU FELT OR FEEL THE ACHES AND PAINS.



### 21. Here are some general questions about your health

Please answer all the questions on the page by underlining or circling the answer you think most closely applies to you.

### HAVE YOU RECENTLY:-

	1	2	3	*
Been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
Lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
Felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
Felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
Felt under constant strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
Felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
Been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
Been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

2.0)	Do you know	people who	o are sick with '	"Gulf War Syndr	ome"?	
		Yes		No	$\square^2$	
b)	Do you think y	ou have "(	Gulf War Syndr	ome"?		
		Yes	<b>□</b> ¹	No	$\square^2$	Not □ applicable
	Are there any portant?	other milita	ary experiences	s or exposures v	ve haven't aske	d about which you think are
		Yes	<b>□</b> ¹	No	$\square^2$	
	If YES, can yo	ou briefly d	escribe them			
				<del> </del>		
d)	Are there other	er health co	oncerns we hav	en't asked abou	t which you thir	nk are important?
/					,	
	١	es/es		No	$\Box^2$	
	If <b>YES</b> , can yo			No	<b>□</b> <sup>2</sup>	
				No	□ <sup>2</sup>	
				No	2	
				No	2	
				No	□ <sup>2</sup>	
				No	□ <sup>2</sup>	
	If YES, can yo	ou briefly d			□ <sup>2</sup>	
	If YES, can yo	ou briefly d	escribe them		□ <sup>2</sup>	

23. If there is anything you would like to add please do so below:

# ONCE THE STUDY TEAM HAS RECEIVED YOUR QUESTIONNAIRE THIS PAGE WILL BE DETACHED TO ENSURE CONFIDENTIALITY

It would be useful if we could contact you in the future. We would be grateful if you could indicate in the box below a preferred contact address, time, and telephone number. Thank you.

	Name:						
	Address:						and the second second second second
						٠.	
	Post code:						
	Telephone No:						
)			Dialing code			Number	
	Contact time:	Daytime		Evening		Anytime	
	Signature:						
	The medical research please indicate below.				ords. If you wis	sh to prevent st	uch access,
)							
	We are very grateful for are offering you the op- name entered in the pr	portunity to	have your name	entered in a £	onnaire. As a t 1000 prize drav	token of our gr w. If you do no	atitude, we t want your
	l <u>do not</u> want my	y name entere	d in the prize d	raw			
	Before returning the g	uestionnaire ir	n the envelope pr	rovided, could v	ou please chec	k that all the que	estions have

FINALLY, THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE

been answered.



### King's College School of Medicine and Dentistry Bessemer Road, London SE5 9PJ Telephone/Facsimile - 0171 737 5267



### HEALTH SURVEY OF MILITARY PERSONNEL

We are seeking your help to provide information for one of the largest studies of military health ever to be undertaken in the United Kingdom. We are carrying out research into the effects of serving in the Gulf War, Bosnia, and the Armed Forces as a whole, on United Kingdom military personnel. To do this we are sending a questionnaire to 13,000 current and former military personnel chosen at random. We will be asking about their health and military experiences. This study is not funded by the MoD, and is independent of the MoD. The MoD has given its cooperation to carry out the study, otherwise we would not be able to know who you are.

We would be most grateful if you could find 20 minutes to complete this questionnaire. IT IS IMPORTANT FOR US TO RECEIVE YOUR REPLY EVEN IF YOU DO NOT HAVE ANY HEALTH PROBLEMS OR IF YOU NO LONGER SERVE IN THE ARMED FORCES. A pen and envelope are provided for the easy completion and return of the questionnaire. The postage is already paid. As a token of our appreciation, when we have received your completed questionnaire, you will have the opportunity to have your name entered in a £1,000 prize draw if you so wish.

All the information collected will be treated in such a way that you will not, and never can be, identified by anyone other than the research team. It will be secured against all unauthorised access. Your responses are totally confidential and no third party will ever be allowed access to the data. We guarantee that the results of the study will be published when ready.

You are under no obligation whatsoever to take part in the study. Nevertheless, we must emphasise how vital your participation is to the understanding of the effects of military service on health. This will be of importance not just to you as an individual, but to military and former military personnel as a group and to others in the future.

If you have any concerns or questions, please write or telephone the Study Co-ordinator Catherine Unwin at the Gulf War Illnesses Research Unit, the phone number and address are at the top of this page. We will be pleased to try and answer any questions you have.

Thanking you in anticipation of your help.

Yours sincerely,

Professor Simon Wessely

Co-director

Professor Anthony David

Co-director

# We would like a few background details first.

1. What is your date of birth?		Date Month Y	ear
2. Are you:			
Z. Pilo you.			
Male		Female	$\square^2$
3. Do you consider yourself to be	•		
White Black Caribbean	□¹ □²	Pakistani Bangladeshi	□ <sup>6</sup>
Black/African	□³ □⁴	Chinese	□° □°
Black/other Indian	□ <sup>5</sup>	Asian/other Other	
What is your current marital sta	atus?		
		Commented	<b>1</b> 4
Married Living with partner		Separated Divorced	□⁴ □⁵
Never married	□ <sup>3</sup>	Widowed	
5. For females;			
a) Have you ever been pregna	ant or ever tried to	become pregnant?	
Yes	<b>□</b> ¹	No	<b>□</b> ²
Farmalas			
For males;			
b) Have you ever fathered a p	regnancy or ever	tried to father a child?	
Yes		No	$\square^2$
6. a) What is the highest level of	education that yo	ou completed?	
Left school before taking 'O' levels/ GCSE's	, 'O' Levels/GCSI	E's	
'A' levels/Highers			$\square^3$
Degree			□⁴
b) What qualifications have yo	u gained since jo	ining the military?	
		1, 34, 37, 10, 37, 11	
7. a) Are you currently working:			
Full-time	•		<b>□</b> ¹
Part-time			$\square^2$
Unemployed but seeking		h.	□³ □⁴
Not working because of Retired from the military		.y	5 □5
Retired from all work			<b>□</b> 6

b)	What is your cur	rent/most recent oc	cupation?		
8. Di	id a change in you	r health cause you	to change you	employ	ment?
	Yes	<b>□</b> ¹		No	$\Box^2$
We v	would now lik	e to know som	e informatio	n abo	ut your lifestyle.
For c					I at least one cigarette a day
9.a)	Have you smoke	ed more than 5 pack	kets of cigarette	es (5 x 2	0) in your lifetime?
	Yes			No	$\Box^2$
	If YES	, go to question 9t	<b>o</b>	If NO,	go to question10a
b)	If <b>YES</b> , are you	currently a regular	smoker?		
	Yes			No	$\square^2$
	If YES	, go to question 9d	<b>S</b>	If NO,	go to question 10a
c)	If YES, how ma	ny cigarettes do yo	u smoke?		
		cigarettes	per day		
Here	are some questi	ons about how m	uch you drink		
10.a)	On average, how week do you ha		t = half pint of	beer or a	a glass of wine) of alcohol per
	None 1-3 un 4-10 u 11-20 21-30 More t	nits units			□¹ □² □³ □⁴ □⁵ □6
b)	Have you chang	ed your alcohol into	ake in the last f	ive year	s?
		ncreased educed			$\Box^1$ $\Box^2$ $\Box^3$

# 11. The following questions are about activities you might do during a typical day, and whether your health limits you in these activities.

	Has your health limited you in:	No, not limited at all	Yes, limited a little	Yes, limited a lot	
a)	Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports (e.g. Football)?	□¹ (Please go to 11c)	□² (Please go to 11b)	□³ (Please go to 11b)	
b)	<b>Moderate activities,</b> such as moving a table, pushing a vacuum cleaner, ten-pin bowling, or swimming?	<b>□</b> ¹	$\Box^2$	□³	
	Lifting or carrying groceries?		$\square^2$	$\square^3$	
	Climbing several flights of stairs?	<b>□</b> ¹	$\Box^2$	$\square^3$	
	Climbing one flight of stairs?	<b>□</b> ¹	$\Box^2$	□3	
	Bending, kneeling, or stooping?	<b>□</b> ¹	$\Box^2$	$\square^3$	
	Walking more than one mile?	□1	<b>□</b> <sup>2</sup>	$\square^3$	
	Walking 100 yards?	<b>□</b> ¹	$\square^2$	$\square^3$	
	Bathing and dressing yourself?		$\Box^2$	$\square^3$	
c)	In the <u>past month</u> , to what extent has your physical normal social activities with family, friends, neighbor		nal problems interfer	ed with your	•
	Not at all Slightly Moderately Quite a bit Extremely	□¹ □² □³ □⁴ □⁵			

<ul> <li>d) During the <u>past 4 weeks</u>, have activities <u>as a result of your parts</u></li> </ul>			ns with your work	or other regular daily
			YES	NO
Cut down on the amount of time activities	e you spent or	n work or other	<b>□</b> ¹	$\Box^2$
Accomplished less than you w	ould like		<b>□</b> ¹	$\square^2$
Were limited in the <b>kind</b> of work	or other activit	ties	□¹	<b>□</b> <sup>2</sup>
Had <b>difficulty</b> performing the wo extra effort)	ork or other ac	tivities (eg. it took	<b>□</b> ¹	<b>□</b> <sup>2</sup>
e) Please choose the answer th	at best describ	oes how <u>true</u> or <u>false</u> eac	h of the following	statements are for you.
		(Please tick one be	ox on each line)	·
	Definitely true	Mostly true	Mostly false	Definitely false
I seem to get ill more easily than other people	<b>□</b> ¹	$\Box^2$	□3	□4
I am as healthy as anybody I know	□¹	$\Box^2$	□3	□4
I expect my health to get worse	<b>□</b> ¹		□3	$\Box^4$
My health is excellent	□1	<b>□</b> <sup>2</sup>	$\square^3$	□ <sup>4</sup>
f) Have you experienced a cha	nae in vour fur	nctioning since the GULF	· WAR?	
Yes □¹		□² Not applicab		
If YES, do you attribute this o	change to your	service in the GULF?		
Yes □¹	No E			
g) Have you experienced a cha	nge in your fui	nctioning since BOSNIA?	?	
Yes □¹	No E	□² Not applicab	le □³	
If YES, do you attribute this of	change to you	r service in BOSNIA?		
Yes □¹	No [	$\beth^2$		

# 12. This section asks you about your military background.

a) When you joined the	military-			
i) were you in:	Army	Royal Marines	Royal Navy	Royal Air Force
	<b>□</b> ¹	$\Box^2$	<b>□</b> <sup>3</sup>	□4
ii) were you a:	Regular	Regular Reservist □²	Volunteer Reservist (TA/RNR/ RRAF)	Other <sup>4</sup> (Please specify
	□¹	Ц²	$\Box^3$	
iii) What was your subs	stantive rank?			
iv) Which Unit did you	join?			
v) Which Corps did you	ı join?			
b) If you were deployed	to the GULF-			
i) when you	Army	Royal Marines	Royal Navy	Royal Air Force
were deployed were you in:	□¹	$\Box^2$	$\square^3$	□⁴
ii) when you were deployed	Regular	Regular Reservist	Volunteer Reservist (TA/RNR/ RRAF)	Other <sup>4</sup> (Please specify
were you a:		$\Box^2$	$\square^3$	·
iii) What was your subs	stantive rank on being	deployed?		
iv) Which Unit were yo	u in on deployment?			
v) Which Corps were y	ou in on deployment?			
c) If you were deployed	to BOSNIA-			
i) when you were deployed	Army	Royal Marines	Royal Navy	Royal Air Force
were deployed were you in:	□¹	$\square^2$	$\square^3$	□⁴
ii) when you were deployed	Regular	Regular Reservist	Volunteer Reservist (TA/RNR/ RRAF)	Other <sup>4</sup> (Please specify
were you a:	□¹	$\square^2$	□3	
iii) What was your subs	stantive rank on being	deployed?		
iv) Which Unit were yo	u in on deployment? _			
v) Which Corps were	you in on deployment	?		

d) Are you still in the m	nilitary?	Yes		No	$\square^2$	
IF YES:						
i) Are you in:	Army	Ro	oyal Marines	Royal N	avy	Royal Air Force
	<b>□</b> ¹		<b>□</b> ²	□3		□4
ii) Are you a:	Regular	Reg	ular Reservist	Volunteer Re (TA/RNR/ I		Other <sup>4</sup> (Please specif
	<b>□</b> ¹		$\square^2$	$\square^3$		was annual to the second of th
iii) What is your subst	antive rank? _					
iv) Which Unit are you	u in?			<u></u>		
v) Which Corps are y	ou in?					
If NO:						
vi) Were you medical	ly discharged?	Yes		No	$\square^2$	
vii) What was your su	bstantive rank o	on leaving the	military?			
,		<b>3</b>				
e) FOR EVERYONE TO						
i) Please state the nu						
eg. Regular	3	Regular Res	servist 0	Vo	lunteer Re	eservist 0
Regular	!	Regular Res	ervist	Vo	lunteer Re	eservist
ii) Did you deploy on;	/Please tick all	that apply)				
OP Granby		шасарріу)				
OP Corporate	□⁵					
OP Hanwood	□°					d1
OP Grapple	□⁴		OP Grapple?			
Others	□e	Pleas	e specify			
						e1
iii) How many tours to	Northern Irela	nd have you be	een on?			
None		is hard you bi	00.1 011.			
Number of tou						

# 13. This section asks about your deployment to the GULF AND/ OR BOSNIA.

If you have been to one theatre, please fill out the appropriate column. If you have been to both the GULF and BOSNIA please complete BOTH columns.

	Please complete this co	complete this column if you were deployed to the GULF.	Please complete this o	Please complete this column if you were deployed to BOSNIA.	ed
Were you:	Ordered to serve □¹	Volunteered to serve □²	Ordered to serve □¹	Volunteered to serve	02
Did you undertake pre-deployment training?	Yes $\square^1$	No $\square^2$	Yes $\square^1$	No No	$\Box^2$
Did you deploy;	With your complete unit As part of your unit As an individual	000	With your complete unit As part of your unit As an individual reinforcement		
During your tour did you leave theatre?	Yes	No	Yes □¹	No	$\Box^2$
Before your deployment where were you based? (Please state nearest town)					
During your deployment where were you based? (Please tick all that apply)	lraq □²		Split	grad	'nβ
				ue Vakuf	֓֞֞֞֜֞֜֞֜֞֜֜֞֜֜֞֜֜֜֜֜֜֓֓֓֓֜֜֜֜֜֜֜֜֜֜֜֜
	Other □⁴ (Please specify)	d1	Sarajevo Ploce (Please specify)	Other	
If in the Navy, which ship were you on?					
Where did you return after deployment? (Please state nearest town)					
How long did you spend in camp on your return before demobilising?	days	weeks	days	weeks	sks
Did you take time off before returning to work?	Yes $\square^1$	No $\square^2$	Yes □¹	No	
				Continued	1

	Please comple	Please complete this column if you were deployed to the GULF		Please comp	mplete this column if deployed to BOSNIA.	Please complete this column if you were deployed to BOSNIA.	
What was your primary duty?	Engaged in combat		ш	Engaged in combat	<u></u>		
	Combat support Signals Medical Logistics		0	Combat support Signals Medical Logistics			
	Staff duties			Staff duties	Ö		
	Other (Please specify)	ا ا		Other (Please specify	 "		
What were your specific duties?							
Where you involved in an "incident" at any time?	Yes	$\Box^1$ No $\Box^2$		Yes		No $\square^2$	
If YES: What was it?							
What was your involvement in it?							
When was it? (Please specify an approximate date) For how long did the "incident" last? (Please specify an approximate length of time)							
Did any of the military actions you took, or didn't take, directly cause the death of another person?	ake, directly cause the	death of another person?	Yes	ν			
If you were deployed to the Gulf, were you stationed within 30 miles of Khamisiyah at any time?	ed within 30 miles of K	hamisiyah at any time?	Yes	, N		Don't Know	Ц
			Not applicable	olicable			

# 14. We would like to know about your experiences whilst in theatre.

Please tick whether you have **EVER** had any direct contact with, or were exposed to, any of the items listed below.

Indicate whether this was when you were in the **GULF** and/ or **BOSNIA**. If so, please estimate how often you were exposed and whether you had an adverse reaction to it.

	EVERYONE please complete this column	IE please iis column	Pleas	deb deb	Please complete this column if you were deployed to the GULF	nn if you w ULF	ere	Plea	se comp	Please complete this column if you were deployed to BOSNIA	in if you v	vere	
	Have you EVER been in contact with? (a)	/ER been ith? (a)	Were you in contact with		If YES, how many times	Did you have	lave se	Were you in contact with	u in with	If YES, how many times	Did you hav	you have	
			this when y were in the	when you e in the	were you exposed to	reaction or feel unwell as a	or feel	this when you were in	en e in	were you exposed to	reaction or feel	or feel	
			GULF? <sup>(b)</sup>		this item? <sup>(c)</sup>	result of this experience? (d)	this se? (d)	Bosnia? (b)	(p)	this item? (c)	result of this experience? (d)	this Ice? (d)	
Example;	Yes¹	No <sup>2</sup>	Yes¹	No <sup>2</sup>	No. of times	Yes	No <sup>2</sup>	Yes1	No2	No. of times	Yes¹	No2	
Smoke from oil well fires	চ		Ŋ		5	Ŋ			D				
Burning rubbish or faeces	Σ		D		2		D	D		_		D	
Now piease complete the table below.	oelow.												
Smoke from oil well fires													-
Exhaust from heaters or													7
generators (eg. Kerosene heaters)													
Diesel and/or other petrochemical													က
fumes					0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								
Diesel or other petrochemical fuel													4
Burning rubbish or faeces				С					Г		С		Ŋ
CARC (Chemical Agent Resistant													9
Compound) paint											i	ı	
Other paints, solvents, or petrochemical substances			0										_
Depleted uranium (DU)	С			Г			C	C					œ
Microwaves													6
Personal pesticides (e.g. creams,										2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			9
Splays, of flea collats) Pesticides on vour clothing or			C	Г								С	7
bedding	1	l	1	]		]	]	]	]		]	]	:
Chemical / Nerve gas attack													12
Mustard gas or other blistering agents													13
Food contaminated with smoke, oil, or other chemicals													4
Local food other than food provided by the Armed Forces		<b>-</b> (								— —			5.

,			,	9 !	17	18	19	50	21	55	23	24	25	26	27	28	59	30		
vere	have rse or feel s a this	Tce? (d)	No <sup>2</sup>																	
in if you v	Did you have an adverse reaction or feel unwell as a result of this	experience? (d)	Yes																	
Please complete this column if you were deployed to BOSNIA	If YES, how many times were you exposed to this item? (c)		No. of times																	
ase comp	Were you in contact with this when you were in BOSNIA <sup>b)</sup>		No											0			□			
Plez	Were you in contact with this when yo were in BOSNIA <sup>b)</sup>	7	Yes																	
ere	have rse r or feel as a f this	nce? (d)	No <sup>2</sup>														□			
in if you ULF	Did you have an adverse reaction or feel unwell as a result of this	experience? (d)	Yes																	
Please complete this column if you deployed to the GULF	If YES, how many times were you exposed to this item? (c)		No. of times																	
deb deb	with en you the	:	No														Г			
1	Were you in contact with this when you were in the GULF? (b)	-	Yes																	
IE prese nis column	<u>/ER</u> been rith? <sup>(a)</sup>	6 ; .	No <sup>2</sup>															rience		
EVERYONE prese complete this column	Have you <u>EVER</u> been in contact with? <sup>(a)</sup>		Yes														Г	osure or expe	mely stresstul	
				Dead animals	Bathe in or drink water contaminated with smoke, oil, or other chemicals	Bathe or swim in the local pond, or river	Suffer from heat cramps, heat exhaustion, heat stroke, or other heat illnesses	Suffer a combat related injury that required medical attention during your deployment	See any dismembered, burnt or otherwise disfigured bodies	See any maimed or seriously injured soldiers	Witness anyone dying	Wear NBC suits at times other than training	Have a SCUD missile explode in the air or on the ground within one mile of you	Have artillery, rockets, mortars, or anything else, other than SCUD missiles, explode in the air or on the ground close to you	Come under small arms fire	Hear chemical alarms sounding	Handle or come into contact with POWs/displaced refugees	Please give details of any other exposure or experience	which you consider harmful or extremely stressful	

# 15. In this section we would like some information about your medical treatment whilst in 'the GULF AND/ OR BOSNIA.

		e complete ere deploye				se complete were deploy		
Do you have a record of vaccinations you have been given?	Yes		No	□ <sup>2</sup>	Yes	□¹	No	□²
If YES, can you please refer to If NO, please do your best to Please indicate if you have no	remembe	r what you	have bee			e the section	n below.	
How many vaccinations did you receive during the 2 months before deployment?	by inject	ion	by mout	h	by inje	ction	by mou	th
Please list what each vaccination was for. eg. Tetanus, anthrax, etc.								
During deployment how many vaccinations did you receive in theatre?	by inject	ion	by mout	-  h	by inje	ction	by mou	th
Please list what each vaccination was for.								
Did you experience any side effects from the vaccinations?	Yes	1	No		Yes	1	No	
While in the military have you used NAPS (little white pills in foil packs), which are used to protect against nerve agents?	Yes	□ <sup>1</sup>	No	□ <sup>2</sup>	Yes	□ <sup>1</sup>	No	□²
If YES; how many days did you take NAPS?			days			***************************************		
In an average day, how many NAPS did you take?			pills					
Whilst in the Gulf, did you suffer from "Saudi Flu"?	Yes	□¹	No	□²				

### 16. The section asks about health.

During the **PAST MONTH** have you suffered from any of the following symptoms. If so, please tick how bad it is and whether you **FIRST** had this symptom **BEFORE** or **AFTER** you served in the **GULF AND/ OR BOSNIA**.

	In the I MONTI have y had? <sup>(a</sup>	H, ou	h s E A			Did you FIRST have this symptom BEFORE or AFTER you went to the GULF? (c)		Did you <u>FIRST</u> have this symptom BEFORE or AFTER you went to BOSNIA? (d)		
SYMPTOMS	Yes <sup>1</sup>	No <sup>2</sup>	Mild <sup>1</sup>	Mod²	Severe <sup>3</sup>	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Chest pain										1
Headaches										2
Rapid heartbeat										3
Irritability/ outbursts of anger										4
Unable to breathe deeply										5
enough										
Faster breathing than normal										6
Feeling short of breath at rest										7
Wheezing										8
Sleeping difficulties										9
Feeling jumpy/easily startled										10
Feeling unrefreshed after										11
sleep										
Fatigue										12
Double vision										13
Intolerance to alcohol										14
Itchy or painful eyes										15
Shaking										16
Tingling in fingers and arms										17
Tingling in legs and arms										18
Numbness or tingling in										19
fingers or toes										
Feeling distant or cut off from										20
others									.,	
Constipation										21
Flatulence or burping										22
Stomach cramp										23
Diarrhoea				· 🗆						24
Dry mouth										25

Continued.....

	In the MONT have y had? <sup>(c</sup>	H, ou	If <u>YES,</u> I	If <u>YES</u> , how bad is it? <sup>(b)</sup>			Did you <u>FIRST</u> have this symptom BEFORE or AFTER you went to the GULF? (c)		Did you <u>FIRST</u> have this symptom BEFORE or AFTER you went to BOSNIA? (d)	
SYMPTOMS	Yes <sup>1</sup>	No²	Mild <sup>1</sup>	Mod <sup>2</sup>	Severe <sup>3</sup>	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Persistent cough										26
Lump in throat										27
Sore throat										28
Forgetfulness										29
Dizziness										30
Feeling disorientated										31
Loss of concentration										•
Pain on passing urine										33
Passing urine more often										34
Burning sensation in the sex										35
organs										
Loss of interest in sex										36
Increased sensitivity to noise										37
Increased sensitivity to light										38
Ringing in the ears										39
Avoiding doing things/										40
situations						:				
Pain, without swelling or										41
redness, in several joints										
Joint stiffness										42
Night sweats which soak the										43
bedsheets										
Feeling feverish										44
Loss or decrease in appetite										45
Nausea										46
Vomiting				- D						47
Distressing dreams										48
Unintended weight gain										49
greater than 10lbs									0	
Unintended weight loss										50
greater than 10lbs										

a) what do you think is wrong with you?					
	***************************************				
b)					
(Please complete this column if you were deployed	(Please com	nlete this	e column	if you we	re deniov
(Please complete this column if you were deployed to the GULF)	(Please com to BOSNIA)	plete this	s column	if you we	re deploy
to the GULF)	to BOSNIA)				
		any of the			
to the GULF)  Do you think any of these symptoms have been caused	to BOSNIA)  Do you think	any of the Bosnia?			
to the GULF)  Do you think any of these symptoms have been caused by serving in the Gulf?	Do you think by serving in	any of the Bosnia? □¹	ese sympt	toms have	
to the GULF)  Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²	Do you think by serving in Yes	any of the Bosnia? □¹	ese sympt	toms have	
to the GULF)  Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²	Do you think by serving in Yes	any of the Bosnia? □¹	ese sympt	toms have	
to the GULF)  Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²	Do you think by serving in Yes	any of the Bosnia? □¹	ese sympt	toms have	
to the GULF)  Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²	Do you think by serving in Yes	any of the Bosnia? □¹	ese sympt	toms have	
to the GULF)  Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²	Do you think by serving in Yes	any of the Bosnia? □¹	ese sympt	toms have	
to the GULF)  Do you think any of these symptoms have been caused by serving in the Gulf?  Yes □¹ No □²	Do you think by serving in Yes	any of the Bosnia? □¹	ese sympt	toms have	

17. During the **PAST YEAR** did you have any of the following medical problems/ conditions? Please tick the appropriate box below. If **YES**, could you please tick whether you **FIRST** had this problem **BEFORE** or **AFTER** you went to the **GULF AND/ OR BOSNIA**.

	the followi	Have you had any of the following in the PAST YEAR?		you <u>FIRST</u> problem r AFTER o the	If <u>YES</u> , did you <u>FIRST</u> have this problem BEFORE or AFTER you went to BOSNIA? (c)		
CONDITION	Yes <sup>1</sup>	No <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	1
High blood pressure							1
Heart disease							2
Stroke							3
Epilepsy							4
Migraines							5
Asthma							6
Loss of hearing							
Bronchitis							8
Pneumonia							9
Tuberculosis (TB)							10
Malaria							11
Sinus problems							12
Ear infection							13
Stomach or duodenal ulcers							14
Colitis/ Crohn's disease							15
Yellow jaundice or Hepatitis							16
Cirrhosis of the liver							17
A thyroid problem							18
Diabetes							
Kidney (renal) disease							20
Frequent bladder infections							21
Arthritis or rheumatism							22
Fibrositis or fibromyalgia							23
Back problems							24
Skin cancer							25
Any other kind of cancer							26
Please specify site of cancer					Continued		26a

15

	Have you h the followi PAST YEA	ng in the	If <u>YES</u> , did <u>FIRST</u> have problem B AFTER you the GULF?	e this EFORE or u went to	If <u>YES</u> , did you <u>FIRST</u> have this problem BEFORE or AFTER you went to BOSNIA? (c)		
CONDITION	Yes <sup>1</sup>	No <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	-
Chronic Fatigue Syndrome/ ME							27
Multiple chemical sensitivity or							28
environmental illness							
Yeast disease or candidiasis							29
Hayfever							30
Eczema or psoriasis							31
Dermatitis or any other skin							32
problem							
Any disease of the hair or scalp,							33
including hair loss							
Any disease of the genital organs							. 34
Subfertility							35
Sexual problems							36
FOR WOMEN ONLY;							1
Premenstrual tension							37
Period problems							38
Miscarriages							39
Any other symptoms/ health condition mentioned? (Please specify)  1)					40		
2)					41		
3)					42		
4)							43

# 18. We would now like to know whether any of the following smells or substances affect you, that is, bring about symptoms\*.

\*A symptom means your awareness of some discomfort or bothersome change, eg. sneezing, runny eyes, pain, swelling, nausea, or trouble concentrating. Please tick the appropriate box. If you have a symptom, please indicate if you had it **BEFORE** or **AFTER** you went to the **GULF AND/ OR BOSNIA**.

		any of the following cause u to have symptoms? (a)  Yes <sup>1</sup> No <sup>2</sup> Don't			you e BEFORE you went F? <sup>(b)</sup>	If <u>YES</u> , did you <u>FIRST</u> have symptoms BEFORE or AFTER you went to BOSNIA? (c)		
	Yes <sup>1</sup>	No <sup>2</sup>	Don't know³	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Smog or air pollution								1
Cigarette smoke								2
Vehicle exhaust or fumes					D			3
Copiers or laser printers								4
Newspapers, magazines, or other newsprint								5
Pesticides, herbicides, insecticides, or fertilizers								6
New office buildings or homes (eg. sealed windows)								7
Carpeting or curtains								8
Organic chemicals, solvents, glues, paints, or fuel								9
Cosmetics, perfumes, hair spray, deodorants, nail polish, or soaps								10
Anything else? (Please specify)								11

# 19. We would like to know whether or not you have been having any problems with feeling tired, weak or lacking in energy in the last few weeks.

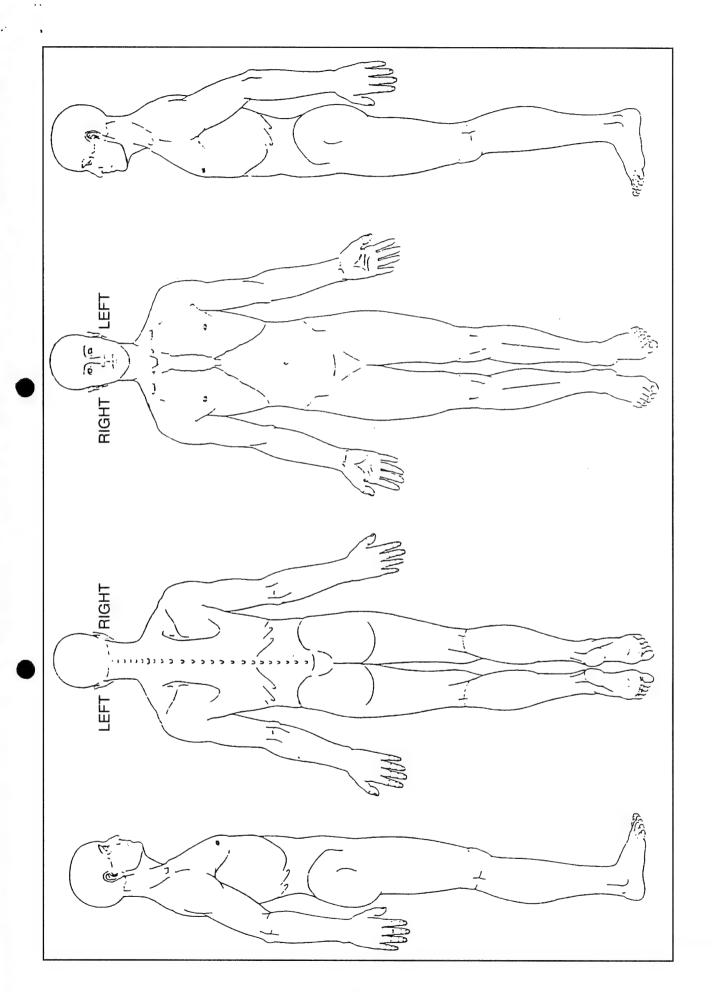
Please answer **ALL** the questions simply by **underlining or circling** the answer which you think most nearly applies to you.

	1	2	3	4
Do you have problems with tiredness?	Less than usual	No more than usual	More than usual	Much more than usual
Do you need to rest more?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you feel sleepy or drowsy?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you have problems starting things?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you lack energy?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you have less strength in your muscles?	Less than usual	Same as usual	More than usual	Much more than usual
Do you feel weak?	Less than	Same as	More than	Much more
	usual	usual	usual	than usual
Do you have difficulty concentrating?	Less than	Same as	Worse than	Much worse
	usual	usual	usual	than usual
Do you make slips of the tongue when speaking?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual
Do you find it more difficult to find the correct word?	Less than usual	No more than usual	Worse than usual	Much worse than usual
How is your memory?	Better than usual	No worse than usual	Worse than usual	Much worse than usual
Do your muscles hurt at rest?	Less than usual	No more than usual	Worse than usual	Much worse than usual
Do your muscles hurt after exercise?	Less than usual	No more than usual	Worse than usual	Much worse than usual

20	. Here are some	e questions a	about aches and	d pains.	
We	e would like you to thin	nk back over the	PAST MONTH, the	n <b>PLEASE TIC</b>	CK ONE BOX FOR EACH QUESTION.
a)	During the PAST MO	NTH have you h	nad any ache or pair	which has las	ted for one day or longer?
		Yes	<b>□</b> ¹	No	$\square^2$
		If YES, please the questions		If NO, plea question 21.	ase turn to
b)	Do you have any pair	n NOW?			
		Yes	□1	No	$\square^2$
c)	When did the pain sta	art?			
		Less than 3 mo			□¹ □²
d)	What do you think ha	s been the caus	e of your pain?		

OVER THE PAGE YOU WILL FIND FOUR DIAGRAMS OF THE BODY.

PLEASE SHADE IN THE DIAGRAMS WHERE YOU FELT OR FEEL THE ACHES AND PAINS.



# 21. Here are some general questions about your health

Please answer all the questions on the page by **underlining** or **circling** the answer you think most closely applies to you.

### HAVE YOU RECENTLY:-

	1	2	3	4
Been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
Lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
Felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
Felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
Felt under constant strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
Felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
Been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
Been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

22.a)	Do you know p	eople who ar	e sick with "Gulf W	ar Syndrome	"?		
		Yes	□¹	No	<b>□</b> <sup>2</sup>		
b)	Do you think yo	ou have "Gulf	War Syndrome"?				
		Yes	<b>□</b> ¹	No	$\square^2$	Not applicable	
	Are there any opportant?	other military	experiences or exp	osures we ha	aven't asked abo	ut which you	think are
		Yes	□ <sup>1</sup>	No	$\square^2$		
	If <b>YES</b> , can you	ı briefly desc	ribe them				
			to the first of the forest section				
				The Freedom Control of the Control o		7-7-744	,
			7			7/8/3/10-10-0	
d)	Are there other	health conce	erns we haven't ask	ked about whi	ich you think are	important?	
•	Ye			No	$\Box^2$	·	
	If YES, can you	ı briefly desc	ribe them				
							A
						1700 10	
	e) In genera	al, would you	say your health is:		3		
		Excellent Very good Good Fair Poor			* on the case are many two costs delighbourses		

23. If there is anything you would like to add please do so below:

# ONCE THE STUDY TEAM HAS RECEIVED YOUR QUESTIONNAIRE THIS PAGE WILL BE DETACHED TO ENSURE CONFIDENTIALITY

It would be useful if we could contact you in the future. We would be grateful if you could indicate in the box below a preferred contact address, time, and telephone number. Thank you.

	Name:						
	Address:						
	Post code:						
	Telephone No:						
)			Dialing code		L	Number	
	Contact time:	Daytime		Evening		Anytime	
	Signature:						
	The medical research please indicate below.		to access you	r medical reco	ords. If you wish	to prevent su	ıch access,
	I refuse the rese	arch team acce	ess to my medic	cal records			
	We are very grateful for are offering you the op- name entered in the pr	portunity to ha	ave your name	entered in a £			
	I <u>do not</u> want my	/ name entered	in the prize dra	aw			
	Before returning the q	uestionnaire in t	the envelope pro	ovided, could v	ou please check	that all the que	stions have

FINALLY, THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE

been answered.



### King's College School of Medicine and Dentistry Bessemer Road, London SE5 9PJ Telephone/Facsimile - 0171 737 5267



### HEALTH SURVEY OF MILITARY PERSONNEL

We are seeking your help to provide information for one of the largest studies of military health ever to be undertaken in the United Kingdom. We are carrying out research into the effects of serving in the Gulf War, Bosnia, and the Armed Forces as a whole, on United Kingdom military personnel. To do this we are sending a questionnaire to 13,000 current and former military personnel chosen at random. We will be asking about their health and military experiences. This study is not funded by the MoD, and is independent of the MoD. The MoD has given its cooperation to carry out the study, otherwise we would not be able to know who you are.

We would be most grateful if you could find 20 minutes to complete this questionnaire. IT IS IMPORTANT FOR US TO RECEIVE YOUR REPLY EVEN IF YOU DO NOT HAVE ANY HEALTH PROBLEMS OR IF YOU NO LONGER SERVE IN THE ARMED FORCES. A pen and envelope are provided for the easy completion and return of the questionnaire. The postage is already paid. As a token of our appreciation, when we have received your completed questionnaire, you will have the opportunity to have your name entered in a £1,000 prize draw if you so wish.

All the information collected will be treated in such a way that you will not, and never can be, identified by anyone other than the research team. It will be secured against all unauthorised access. Your responses are totally confidential and no third party will ever be allowed access to the data. We guarantee that the results of the study will be published when ready.

You are under no obligation whatsoever to take part in the study. Nevertheless, we must emphasise how vital your participation is to the understanding of the effects of military service on health. This will be of importance not just to you as an individual, but to military and former military personnel as a group and to others in the future.

If you have any concerns or questions, please write or telephone the Study Co-ordinator Catherine Unwin at the Gulf War Illnesses Research Unit, the phone number and address are at the top of this page. We will be pleased to try and answer any questions you have.

Thanking you in anticipation of your help.

Yours sincerely,

Professor Simon Wessely

Co-director

Professor Anthony David

Co-director

,	· , (-)
We realise that some of you may not have been deployed to the Gulf. In this questionnaire we are interested in any information you can give us about your military experiences, wherever you served.	

# We would like a few background details first.

1. What is	your date of birth?	Date	/// Month Year	
		Date	Month Tear	
2. Are you:				
M	ale		Female	$\square^2$
3. Do you o	consider yourself to be:			
BI BI	hite ack Caribbean ack/African ack/other dian	□¹ □² □³ □⁴ □⁵	Pakistani Bangladeshi Chinese Asian/other Other	□ <sup>6</sup> □ <sup>7</sup> □ <sup>8</sup> □ <sup>9</sup>
4. What is	your current marital status?			
Li	arried ving with partner ever married	□¹ □² □³	Separated Divorced Widowed	□ <sup>4</sup> □ <sup>5</sup> □ <sup>6</sup>
5. <i>For fem</i>	ales;			
a) Have	you ever been pregnant or ev	ver tried to beco	me pregnant?	
Ye	es	<b>□</b> ¹	No	<b>□</b> <sup>2</sup>
For male	es;			
b) Have	you ever fathered a pregnand	cy or ever tried t	o father a child?	
Ye	es	□1	No	<b>□</b> <sup>2</sup>
მ. a) What	is the highest level of educati	on that you com	pleted?	
'O	eft school before taking 'O' Lev ' levels/ GCSE's ' levels/Highers egree	vels/GCSE's		□¹ □² □³ □⁴
b) What	qualifications have you gaine	d since joining t	he military?	
7. a) Are y	ou currently working:			
Pa Ur No Re	ull-time art-time nemployed but seeking work of working because of ill health etired from the military etired from all work	n/ disability		□¹ □² □³ □⁴ □⁵

b) \ -	What is your curi	rent/most recent occupa	ation?		
-					
B. Did	a change in you	r health cause you to ch	nange your employ	yment?	
	Yes	<b>□</b> ¹	No	$\Box^2$	
Ve w	ould now like	e to know some in	formation abo	ut your lifest	tyle.
or ou		ar smoker is someone			
9.a) l	Have you smoke	ed more than 5 packets	of cigarettes (5 x 2	20) in your lifetim	e?
	Yes	□1	No	$\square^2$	
	If YES,	go to question 9b	If NO,	go to question	10a
b) l	if <b>YES</b> , are you <b>c</b>	currently a regular smo	ker?		
	Yes	<b>□</b> ¹	No	$\square^2$	
	If YES,	, go to question 9c	If NO,	go to question	10a
c) l	If <b>YES</b> , how man	ny cigarettes do you smo	oke?		
		cigarettes per	day		
Here a	re some questi	ons about how much	you drink.		
	On average, hov week do you ha	v many units (1 unit = h ve?	alf pint of beer or	a glass of wine)	of alcohol per
	None 1-3 uni			$\Box^1$ $\Box^2$	
	4-10 ui 11-20 i			□ <sup>3</sup> □ <sup>4</sup>	
	21-30 ( More t	units han 30 units		□ <sup>5</sup> □ <sup>6</sup>	
b)	Have you chang	ed your alcohol intake i	n the last five year	rs?	
	No Van in			□¹ □²	
	Yes, in Yes, re	creased educed		$\square^2$ $\square^3$	

11.	The following questions are about activities you might do during a typical day, and	d
	whether your health limits you in these activities.	

	Has your health limited you in:	No, not limited at all	Yes, limited a little	Yes, limited a lot
a)	Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports (e.g. Football)?	□¹ (Please go to 11c)	□² (Please go to 11b)	□³ (Please go to 11b)
b)	Moderate activities, such as moving a table, pushing a vacuum cleaner, ten-pin bowling, or swimming?	□1	<b>□</b> ²	□³
	Lifting or carrying groceries?		$\square^2$	$\square^3$
	Climbing several flights of stairs?		$\Box^2$	□3
	Climbing one flight of stairs?		$\square^2$	<b>□</b> <sup>3</sup>
	Bending, kneeling, or stooping?		$\square^2$	□3
	Walking more than one mile?		$\Box^2$	<b>□</b> <sup>3</sup>
	Walking 100 yards?	<b>□</b> ¹	$\square^2$	$\square^3$
	Bathing and dressing yourself?	<b>□</b> ¹	$\square^2$	$\square^3$

c) In the <u>past month</u>, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbours, or groups?

Not at all  $\square^1$  Slightly  $\square^2$  Moderately  $\square^3$  Quite a bit  $\square^4$  Extremely  $\square^5$ 

d) During the past 4 weeks, have activities as a result of your ph			s with your work	or other regular daily			
			YES	NO			
Cut down on the amount of time activities	you spent on	work or other	□1	$\Box^2$			
Accomplished less than you wo	uld like			$\Box^2$			
Were limited in the <b>kind</b> of work or other activities $\Box^1$ $\Box^2$							
Had <b>difficulty</b> performing the work or other activities (e.g. it took extra effort) $\Box^2$							
e) Please choose the answer tha	t best describ	oes how <u>true</u> or <u>false</u> each (Please tick one bo					
	Definitely	Mostly	Mostly	Definitely			
	true	true	false	false			
I seem to get ill more easily than other people		$\Box^2$	$\square^3$	<b>□</b> <sup>4</sup>			
I am as healthy as anybody I know	<b>□</b> ¹	$\Box^2$	<b>□</b> <sup>3</sup>	□4			
I expect my health to get worse		$\Box^2$	$\square^3$	$\Box^4$			
My health is excellent	□¹	$\square^2$	□ <sup>3</sup>	□4			
f) Have you experienced a chan	ae in vour fur	nctioning since JANUAR	<b>Y 1</b> 991 (the time	e of the Gulf War) ?			
Yes		]2	,				
162 LI	NO L	-					
If YES, do you attribute this ch	nange to your	military work AT THIS T	IME (January 1	991)?			
Yes □¹	No E	]2					

12. This section asks you about your military background. a) When you joined the militaryi) were you in: Royal Marines Armv Royal Navy Royal Air Force  $\Box^1$  $\square^2$  $\square^3$  $\Box^4$ ii) were you a: Regular Regular Reservist Volunteer Reservist Other 4 (Please specify) (TA/RNR/ RRAF)  $\square^1$  $\square^2$  $\square^3$ iii) What was your substantive rank? iv) Which Unit did you join? \_\_\_\_\_ v) Which Corps did you join? In JANUARY 1991 (the time of the Gulf War)i) were you in: Army **Royal Marines** Royal Navy Royal Air Force  $\Box^1$  $\square^2$  $\square^3$  $\square^4$ ii) were you a: Regular Regular Reservist Volunteer Reservist Other 4 (Please specify) (TA/RNR/ RRAF)  $\Box^1$  $\square^2$  $\square^3$ iii) What was your substantive rank in JANUARY 1991? \_\_\_\_\_\_ iv) In which Unit were you in JANUARY 1991? v) In which Corps were you in JANUARY 1991? \_\_\_\_\_ Are you still in the military? Yes  $\square^1$  $\square^2$ No IF YES: i) Are you in: Army Royal Marines Royal Navy Royal Air Force  $\Box^1$  $\square^2$  $\square^3$  $\square^4$ ii) Are you a: Regular Regular Reservist Volunteer Reservist Other 4 (Please specify) (TA/RNR/ RRAF)  $\Box^1$  $\square^2$  $\square_3$ 

iii) What is your substantive rank?

v) Which Corps are you in?

iv) Which Unit are you in?

riease s	state the number of	f years you h	nave been or were in each	of the follow		
g.	Regular	3	Regular Reservist	0	Volunteer Reservist	0
F	Regular		Regular Reservist		Volunteer Reservist	
Did you	deploy on; (Please	tick all that	apply)			
	OP Granby	□a				
	OP Corporate	□b				
	OP Hanwood	Пс				
	OP Grapple	$\square_{q}$	Which OP Grapple? _			d1
	Others	Пе	Please specify			
						e1
How ma	any tours to Northe	ern Ireland ha	ave you been on?			
	None					
		<b>S</b>				

### 13. We would like to know about your military experiences.

Please tick whether you have **EVER** had any direct contact with, or were exposed to, any of the items listed below. Indicate whether this was in **JANUARY 1991** (the time of the Gulf War). If so, please estimate how often you were exposed and whether you had an adverse reaction to it.

	Have you EVER been in contact with? (a)		EVER been this in many times in contact January were you		Did you have an adverse reaction or feel unwell from this experience?			
Evenue	Yes <sup>1</sup>	No²	Yes <sup>1</sup>	No²	No. of times	Yes 1	No ²	
Example; Smoke from oil well fires			II				<u> </u>	
Burning rubbish or faeces		☑			1	<u> </u>		
Burning rubbish of faeces			Ø		<u> </u>	i 🗆 🗆		
Now please complete the table	below							
Smoke from oil well fires			II 0					1
Exhaust from heaters or					•			2
generators (e.g., Kerosene			-			LJ		-
heaters)						i		l
Diesel and/or other								3
petrochemical fumes				Ы		l Lil		ľ
Diesel or other petrochemical							<u> </u>	4
fuel on your skin		ш		Ц	İ	i L		4
Burning rubbish or faeces		П				ļ	ļ	5
CARC (Chemical Agent							<u> </u>	1 -
Resistant Compound) paint								6
Other paints, solvents, or						 	ļ	_
petrochemical substances								7
						 	ļ	
Depleted uranium (DU)								8
Microwaves								9
Personal pesticides (e.g.								10
creams, sprays, or flea collars)						 		
Pesticides on your clothing or								11
bedding						· · · · · · · · · · · · · · · · · · ·		
Chemical / Nerve gas attack								12
Mustard gas or other blistering								13
agents						 	} 4 9 9	l
Food contaminated with smoke,								14
oil, or other chemicals						 	• • •	
Dead animals								16
Bathe in or drink water								17
contaminated with smoke, oil, or								
other chemicals							, , ,	
Suffer from heat cramps, heat						· 🗆		19
exhaustion, heat stroke, or other						l 1	* * * * * * * * * * * * * * * * * * *	
heat illnesses						***************************************		
Suffer a combat related injury								20
that required medical attention						-		
during your deployment								
See any dismembered, burnt or								21
otherwise disfigured bodies								
See any maimed or seriously								22
injured soldiers			ļ					
Witness anyone dying								23
Wear NBC suits at times other								24
than training					į			

Continued .....

	Have you EVER been in contact with? (a)		EVER been this in		If <u>YES</u> , how many times were you exposed to this item? <sup>(c)</sup>	Did you have an adverse reaction or feel unwell from this experience? <sup>(d)</sup>	
	Yes <sup>1</sup>	No²	Yes <sup>1</sup>	No²	No. of times	Yes 1	No <sup>2</sup>
Have a SCUD missile explode in the air or on the ground within one mile of you							
Have artillery, rockets, mortars, or anything else, other than SCUD missiles, explode in the air or on the ground close to you							
Come under small arms fire							
Hear chemical alarms sounding Handle or come into contact with POWs/ displaced refugees							
Please give details of any other exposure or experience which you consider harmful or extremely stressful							

# 14. In this section we would like some information about your medical treatment.

While in the military have you used NAPS (little white pills in foil packs), which are used to protect against nerve agents?	Yes	□¹	No	□ <sup>2</sup>
Do you have a record of vaccinations you have been given?	Yes	□¹	No	$\Box^2$
Did you receive any vaccinations between NOVEMBER 1990 AND MARCH 1991?	Yes	□¹	No	□ <sup>2</sup>
If YES, did you experience side effects from these vaccinations?	Yes	□¹	No	□²

#### 15. The section asks about health.

During the **PAST MONTH** have you suffered from any of the following symptoms. If so, please tick how bad it is and whether you **FIRST** had this symptom **BEFORE** or **AFTER JANUARY 1991** (the time of the Gulf War).

	In the PA MONTH, had? (a)		If <u>YES</u> , ho	ow bad is i	<b>(?</b> <sup>(b)</sup>	Did you <u>F</u> have this BEFORE JANUARY	symptom or AFTER	
SYMPTOMS	Yes <sup>1</sup>	No <sup>2</sup>	Mild <sup>1</sup>	Mod <sup>2</sup>	Severe <sup>3</sup>	Before <sup>1</sup>	After <sup>2</sup>	1
Chest pain								1
Headaches								2
Rapid heartbeat								3
Irritability/ outbursts of anger								4
Unable to breathe deeply enough								5
Faster breathing than normal								6
Feeling short of breath at rest								. 7
Wheezing								. 8
Sleeping difficulties								9
Feeling jumpy/easily startled								10
Feeling unrefreshed after sleep	1							1
Fatigue								1:
Double vision								1:
Intolerance to alcohol								14
Itchy or painful eyes								1!
Shaking								10
Tingling in fingers and arms								1
Tingling in legs and arms								18
Numbness or tingling in fingers or toes								19
Feeling distant or cut off from others								20
Constipation								2
Flatulence or burping								22
Stomach cramp								23
Diarrhoea								24
Dry mouth								25
Persistent cough								26
Lump in throat								27
Sore throat								28
Forgetfulness								29

	In the PAS MONTH, h had? <sup>(a)</sup>		If <u>YES</u> , ho	w bad is it	<b>?</b> (b)	Did you <u>F</u> have this BEFORE ( JANUAR)	symptom or AFTER	
SYMPTOMS	Yes <sup>1</sup>	No²	Mild <sup>1</sup>	Mod²	Severe <sup>3</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Dizziness								30
Feeling disorientated								31
Loss of concentration								32
Pain on passing urine								33
Passing urine more often								34
Burning sensation in the sex								35
organs				# 6 6 6 6 6 6 6 6				
Loss of interest in sex								36
Increased sensitivity to noise								37
Increased sensitivity to light								38
Ringing in the ears								39
Avoiding doing things/ situations								40
Pain, without swelling or redness,								41
in several joints							• • • • • • • • • • • • • • • • • • •	
Joint stiffness								42
Night sweats which soak the								43
bedsheets								
Feeling feverish								44
Loss or decrease in appetite								45
Nausea								46
Vomiting								47
Distressing dreams								. 48
Unintended weight gain greater								49
than 10lbs								
Unintended weight loss greater								50

Continued	antinuad

nat ao you a	k is wrong with yo	u.			
ou think any of t	these symptoms h	nave been cause	d by your military serv	vice in <b>JANUARY 1</b>	991?
ou think any of t	these symptoms h	nave been cause No	d by your military ser\ □²	vice in <b>JANUARY 1</b> 9	991?
Yes				vice in <b>JANUARY 1</b>	991?
Yes				vice in <b>JANUARY 1</b>	991?
				vice in <b>JANUARY 1</b>	991?
Yes				vice in <b>JANUARY 1</b>	991?
Yes				vice in <b>JANUARY 1</b>	991?

16. During the PAST YEAR did you have any of the following medical problems/ conditions? Please tick the appropriate box below. If YES, could you please tick whether you FIRST had this problem BEFORE or AFTER JANUARY 1991 (at the time of the Gulf War)?

	Have you had an following in the F	y of the PAST YEAR? <sup>(a)</sup>	If <u>YES</u> , did you <u>F</u> problem BEFORE JANUARY 1991?	or AFTER
CONDITION	Yes <sup>1</sup>	No <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>
High blood pressure				
Heart disease				
Stroke				
Epilepsy				
Migraines				
Asthma				
Loss of hearing				
Bronchitis				
Pneumonia				
Tuberculosis (TB)				
Malaria				
Sinus problems				
Ear infection				
Stomach or duodenal ulcers				
Colitis/ Crohn's disease				
Yellow jaundice or Hepatitis				
Cirrhosis of the liver				
A thyroid problem				
Diabetes				
Kidney (renal) disease				
Frequent bladder infections				
Arthritis or rheumatism				
Fibrositis or fibromyalgia				
Back problems				
Skin cancer				
Any other kind of cancer				

	Have you had ar following in the		If <u>YES</u> , did you problem BEFOR JANUARY 1991	E or AFTER	
CONDITION	Yes <sup>1</sup>	No <sup>2</sup>	Before <sup>1</sup>	After <sup>2</sup>	1
Chronic Fatigue Syndrome/ ME					2
Multiple chemical sensitivity or					28
environmental illness					
Yeast disease or candidiasis					29
Hayfever					30
Eczema or psoriasis					3
Dermatitis or any other skin problem					32
Any disease of the hair or scalp,					33
including hair loss				•	
Any disease of the genital organs					34
Subfertility					35
Sexual problems					. 36
FOR WOMEN ONLY;	1				1
Premenstrual tension					37
Period problems					38
Miscarriages					39
Any other symptoms/ health conditio (Please specify)  1)	ns we have not men	itioned			40
2)					41
3)					42
4)					43

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# 17. We would now like to know whether any of the following smells or substances affect you, that is, bring about symptoms\*.

\*A symptom means your awareness of some discomfort or bothersome change, e.g.. sneezing, runny eyes, pain, swelling, nausea, or trouble concentrating. Please tick the appropriate box. If you have a symptom, please indicate if you had it **BEFORE or AFTER JANUARY 1991 (the time of the Gulf War)**.

	Do you have sy	/mptoms? <sup>(a)</sup>		If <u>YES</u> , did you <u>F</u> symptom BEFOF JANUARY 1991?	RE or AFTER	
	Yes <sup>1</sup>	No²	Don't know <sup>3</sup>	Before <sup>1</sup>	After <sup>2</sup>	
Smog or air pollution						1
Cigarette smoke						2
Vehicle exhaust or fumes						3
Copiers or laser printers						4
Newspapers, magazines, or other newsprint						5
Pesticides, herbicides, insecticides, or fertilizers				0		6
New office buildings or homes (e.g., sealed windows)						7
Carpeting or curtains						8
Organic chemicals, solvents, glues, paints, or fuel						9
Cosmetics, perfumes, hair spray, deodorants, nail polish, or soaps						10
Anything else? (Please specify)						11

# 18. We would like to know whether or not you have been having any problems with feeling tired, weak or lacking in energy in the last few weeks.

Please answer ALL the questions simply by underlining or circling the answer which you think most nearly applies to you.

	1	2	3	4
Do you have problems with tiredness?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you need to rest more?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you feel sleepy or drowsy?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you have problems starting things?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you lack energy?	Less than	No more	More than	Much more
	usual	than usual	usual	than usual
Do you have less strength in your muscles?	Less than	Same as	More than	Much more
	usual	usual	usual	than usual
Do you feel weak?	Less than	Same as	More than	Much more
	usual	usual	usual	than usual
Do you have difficulty concentrating?	Less than	Same as	Worse than	Much worse
	usual	usual	usual	than usual
Do you make slips of the tongue when speaking?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual
Do you find it more difficult to find the correct word?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual
How is your memory?	Better than	No worse	Worse than	Much worse
	usual	than usual	usual	than usual
Do your muscles hurt at rest?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual
Do your muscles hurt after exercise?	Less than	No more	Worse than	Much worse
	usual	than usual	usual	than usual

1 1 3 1

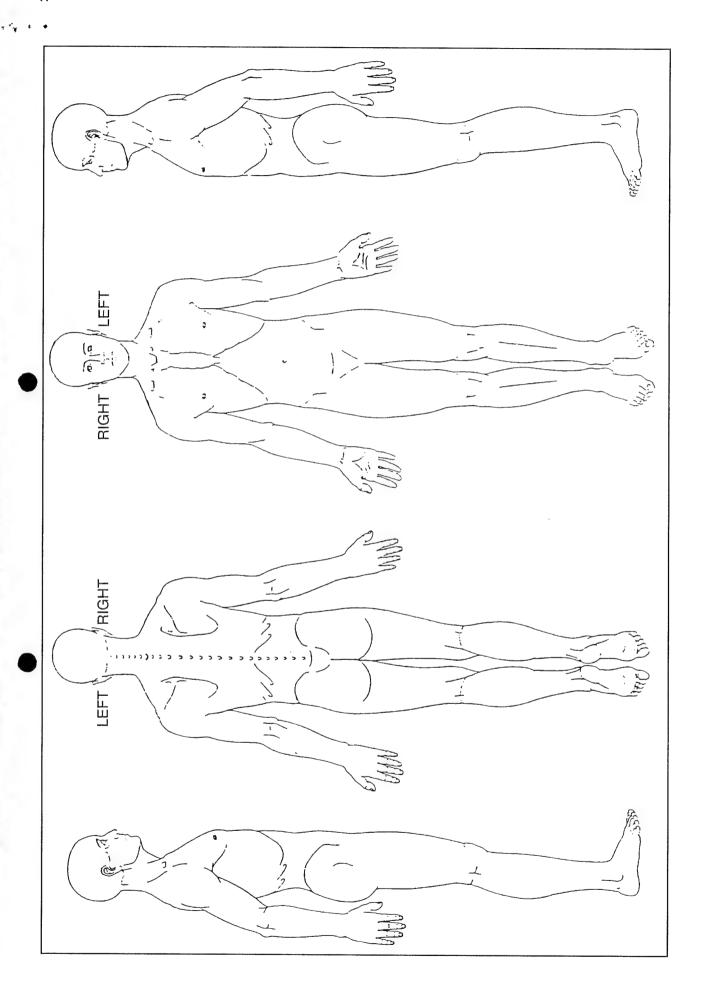
### 19. Here are some questions about aches and pains.

We would like you to think back over the <b>F</b>	PAST MONTH, then F	PLEASE TICK ONE BOX	FOR EACH QUESTION.
---	--------------------	---------------------	--------------------

a)	During the PAST MO	NTH have you h	ad any ache or pain w	hich has laste	ed for one day or longer?
		Yes	$\square^1$	No	$\square^2$
		If YES, please all the questio		If NO, pleas question 20	
b)	Do you have any pain	NOW?			
		Yes	□ <sup>1</sup>	No	$\Box^2$
c)	When did the pain sta	rt?			
		Less than 3 mo More than 3 mo			
d)	What do you think has	s been the cause	e of your pain?		

PLEASE SHADE IN THE DIAGRAMS WHERE YOU FELT OR FEEL THE ACHES AND PAINS.

Over the page you will find four diagrams of the body.



### 20.Here are some general questions about your health

Please answer all the questions on the page by underlining or circling the answer you think most closely applies to you.

#### HAVE YOU RECENTLY:-

	1	2	3	4
Been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
Lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
Felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
Felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
Felt under constant strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
Felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
Been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
Been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
Been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

21.a)	) Do you know	people wno					
		Yes		No	$\Box^2$		
b)	Are there any important?	other militar	ry experiences or	exposures w	e haven't asked a	bout which you thin	ık are
		Yes	□¹	No	$\Box^2$		
lf '	YES, can you t	briefly descri	be them				
_							
-							
					We distribute		· · · · · · · · · · · · · · · · · · ·
_							
_							***************************************
		Yes	rns we haven't as □¹ be them	sked about wh	ch you think are i	mportant?	
	١	Yes	□¹			mportant?	
	١	Yes	□¹			important?	
	١	Yes	□¹			mportant?	
	١	Yes	□¹			mportant?	
	YES, can you b	Yes	□¹			mportant?	

22. If there is anything you would like to add please do so below:

## ONCE THE STUDY TEAM HAS RECEIVED YOUR QUESTIONNAIRE THIS PAGE WILL BE DETACHED TO ENSURE CONFIDENTIALITY

It would be useful if we could contact you in the future. We would be grateful if you could indicate in the box below a preferred contact address, time, and telephone number. Thank you.

	Name:							
	Address:							
				***************************************				
	Post code:							
	Telephone No:							
,		Dialing code			Number			
	Contact time:	Daytime		Evening		Anytime		
	Signature:					1801		
	The medical research team may wish to access your medical records. If you wish to prevent such access, please indicate below.							
	I refuse the rese	I refuse the research team access to my medical records						
)								
We are very grateful for your assistance in completing this questionnaire. As a token of our gratitude, we are offering you the opportunity to have your name entered in a £1000 prize draw. If you do not want your name entered in the prize draw, please tick the box below.								
	I do not want my name entered in the prize draw							
	Before returning the questionnaire in the envelope provided, could you please check that all the questions have							

FINALLY, THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE

been answered.